



# The Ancient Mariner



Legends of The Wireless Pioneers

# SPARKS JOURNAL

Society of Wireless Pioneers Inc.

VOLUME 8, NO.1

SEPTEMBER 20 1985

THE ANCIENT MARINER EDITION

RECORDING THE EARLY HISTORY & DEVELOPMENT OF THE WIRELESS

## —CAPTAIN COLUMBUS—

# Was the voyage worth it?



formance of an investigation of such a claim is not incumbent upon other claimants under Royal Statute KP 143(e)IV; however, failure to note the possible existence of such a claim, if it should be honored in the future, would subject any other claimant, such as yourself, to loss of all titles, moneys, and honors appertaining to the alleged discovery, plus payment of interest, penalty, etc.

Should it further be the case that other human beings of whatever race or condition appear, whose residence in the assertedly discovered place can be found to antedate that of another claimant -- in your case, for example, to be in possession of the aforementioned land prior to 12:01 a. m. Oct. 12, 1492, their claim to the discovery may at some future date be honored by appropriate courts and/or legislatures.

In short, Senor Columbus -- and I am empowered under Departmental Rule of Procedure RP11(e)V, Informal Gratuitous Comments, to say this to you -- it may be that you will wish to reconsider pressing your claim to the discovery of America.

Whatever your decision, having reported that your voyage is now ended, all forms relating to Safety and Health of the Crew, Equal Opportunity Compliance Procedures, and Environmental Impact of the Asserted Discovery of Any Piece of Land Large or Small, fall due immediately and if they are not received within fifteen (15) days subsequent to Oct. 12, 1492, you are subject to treble damages listed under Royal Statutes SS 1105 etc.

Sincerely,  
ROYAL COMMISSIONER

Reprinted by permission - Story by Jack Markowitz, as appeared in the Pittsburgh Post Gazette.

Dear Capt. Columbus:

Your message of Oct. 12, 1492 announcing the discovery of America, though in improper form, is acknowledged.

Please be advised that before your claim can be taken up by the Royal Office of Discoveries, it will be necessary to resubmit all appropriate data in proper form.

Enclosed are three forms F-11011, titled Reports of Purported Discoveries of Large Bodies of Land (100,000 square miles or more). If you have reason to believe that America is less than 100,000 square miles in extent, you may use Short Form F-11011a. If you are in error, and America should prove to be larger than you thought, Advance Admission of Error Form F-22022 may be submitted in triplicate to this office, the Justice Department and the Commerce Department.

You will note that the first box on all these forms asks your correct name, last name first. If at any time you have been known by another name -- for example, Cristobal Colon or Colombo possibly denoting birth in a foreign land, e.g. Italy -- it will be necessary for you to submit three forms F-11043, Registration of a Legitimate Alias, and three certified copies of your Birth Certificate.

I direct your attention to Block 17a on Page 4, marked Working Conditions on the Voyage. It is recorded that your ships left the Port of Palos on Aug. 3 and therefore were at sea more than two months. Had you prior reason to believe the voyage would last so long? Were overtime wages paid? In what amount? Were your food stores sufficient to sustain the health of the crew for some 70 days? Was there stormy weather during which crews were ordered aloft to take in sail under less than safe conditions? Did the crew's authorized bargaining unit come forward to say "Captain, O captain, sail home or face authorized grievance procedure." citing the appropriate section? Any and all such occurrences must be reported in block 17a, and if there is insufficient space, please make use of Additional Explanatory Form 11043a.

I also direct your attention to Block 53, on Page 9: Possible Prior Claims. It has been often rumored in Europe, that crews of Vikings several centuries ago discovered America in approximately the same vicinity where you claim to have discovered America. Direct per-



THE GUARDIAN ANGEL OF THE SEA PAYS TRIBUTE TO THE MARTYRED HEROES

TOLL FOR THE BOARD! —  
THE BRAVE THAT ARE NO MORE!  
FALL SUNK BENEATH THE WAVE  
FIRST BY THEIR NATIVE SHORE!  
—COWPER—

## In Memory of the Titanic



**SPARKS JOURNAL USPS 365-050**

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PUBLICATION DATE



SPARKS JOURNAL  
SEPT. 20 1985  
ANCIENT MARINERS  
EDITION  
VOL. 8 NUMBER 1



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Founded 1968 by William A. Brennan

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Early Days of The Wireless



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DEMchuck (From idea by Donald de Neuf)  
YOU TALKIN' ABOUT AUTOMATING VESSELS?  
NOT MY SHIP YOU DON'T!



**ELECTION CANDIDATES**

Election of Officers and Board of Governors for the period 1985-1988 include the following members as recommended by the Nominating Committee. This subject to election results and acceptance by by listed nominees, most of whom have indicated their acceptances.

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Early Days of The Wireless - A Historical Record

THE

# WIRELESS

# PIONEERS



## The Skipper's Log

By  
William A. Breniman  
Founder & Executive Director



### Professional Operatory

### ANNUAL SOWP CW QSO PARTY

SOWP RADIO AMATEURS TAKE NOTE! PARTICIPATE IN OUR ANNUAL QSO PARTY! IT'S SCHEDULED FOR TWO SUCCESSIVE WEDNESDAYS, DECEMBER 4 and 11, 1985, WITH TWELVE HOURS OPERATION EACH DAY, 1700 UTC to 0500 UTC. (9 AM to 9 PM Pacific Time.) (10 AM to 10 PM, Mountain Time.) (11 AM to 11 PM Central Time) and (12 Noon to 12 Midnight, Eastern Time.)

FREQUENCIES: 3550-3570, 7050-7070, 14050-14070, 21050-21070 KHZ. FOR SSB OPERATION, 14250-14270 KHZ.

MESSAGE EXCHANGE: (MSG. NR.) (CALL) (STATE) (NAME)  
Example: (NR. 1 W4NH VA EM)

SCORING: ONE POINT PER QSO ON EACH BAND WORKED.  
(Contacts during net schedules will not be counted.)

SEND LOG SHEETS SHOWING MSG. EXCHANGE, DATE, TIME AND BAND TO JOHN H. SWAFFORD, W4HU, SOWP VP-AWARDS, 2025 N. KENSINGTON ST., ARLINGTON, VA., 22205 BY JANUARY 15, 1986.

CERTIFICATES WILL BE AWARDED TO THE THREE HIGHEST SCORING OPERATORS, WIN, PLACE and SHOW.

\*\*\*\*\*

This year's SOWP QSO PARTY is sponsored by our Washington, D.C. Capital Area Chapter X. Em Mehrling, W4NH, is General Chairman of the affair. Our thanks to Em and his gang.

T. K. "Ted" Phelps, Vice President-Comm.



### EIGHT BELLS



### TIME TO CHANGE THE WATCH

"EIGHT BELLS" signals "Change of watch" on ships all over the world. This indicates that ballots are being distributed to members for their pleasure in deciding the staffing for the coming two years. The slate of candidates by the Nominating Committee is listed at bottom right, Page 2. While "Ye Ed" will allow his name to remain on the ballot as Exec. Secretary, he would like to be relieved of the extremely heavy work-load he handled since founding of the Society nearly 18 years ago. At 85 he finds some diminishing capacity to handle the work-load effectively. He would however volunteer to continue as Editor for a period of time. I am sure there are those in the organization with ability and dedicated interest who might find such a position a real challenge. Volunteers for the post are invited to signify their interest. Your Secretary finds it increasingly embarrassing not to answer correspondence with dispatch; however, there are only so many hours in a day and he has been forced to adhere to handling priorities most important to the Society. I am sure most of our members understand, however it continues to furnish frustration in not keeping up my part of contact with old friends whose friendship and good will I value above all else.



### SHORT CIRCUITS

#### GEMS OF WISDOM??

Life is a grindstone. But whether it grinds us or polishes us depends on the stuff of which we are made...Before offering a seat to a girl, be sure she is!...A photo of a girl in a bikini is not a snapshot - it's an exposure...The man who horseshoes around with the girls may one day find that he is a groom...A sermon can help people in different ways. Some rise from it greatly strengthened; others wake up from it refreshed...You know when you've reached middle age when you'd rather not have a good time than have to recover from it...A butcher is a guy whose hands always get in his weigh...Since I got married I don't worry about bad breath, I never get a chance to open my mouth!...If you think time heals everything, try sitting it out in a doctor's office...A woman will pay twenty-five dollars for a slip, and then be annoyed if it shows...One thing wrong with the younger generation is that many of us don't belong to it anymore...Winning isn't everything, but losing isn't anything...Burn the candle at both ends and you double the chances of getting your fingers burned...A hippie who reviews books is known as a hip-piecritic...Both sugar and vinegar are preservatives, so it seems to boil down to whether you want to be pickled or in a jam...Careless drivers are gamblers who play the hearse...Water is ice that's lost its cool...Then there was the fellow who gave up smoking for his health and took up chewing tooth-picks instead. Now he's got the Dutch Elm disease...Confusion is one woman plus one left turn; excitement is two women plus one secret; bedlam is three women plus one bargain; chaos is four women plus one luncheon check...Because of lack of interest tomorrow will be postponed.

*"The world is a great book of which they who never stir from home read only a page."*  
 AUGUSTINE A.D. 430

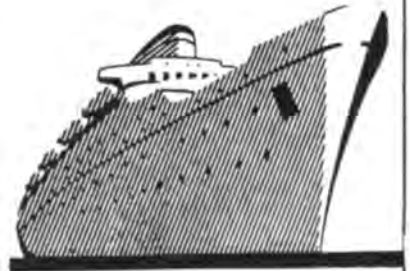
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ERRATA SHEETS for the 1985 SOWP DIRECTORY & CALL BOOK will soon be in the mail.



CQD to SOS  
**The Golden Age of Wireless**  
 From Tramp Steamers to Liners



*Chapter One*  
 BY WILLIAM A. BRENNAN



**Call Me Sparks**

The dawn of the Twentieth Century brought many changes to the sea-lanes of the world. The square-riggers and clippers that had brought glory in the days of sail were fast fading into history and their places were being taken by the new fast ocean greyhounds that were cutting time across the Western Ocean, reducing transit passage from weeks and sometimes months to days! With this change, came a new breed of men, who were not content with the heritage and status-quo of sail, but who were dedicated to progress and who could sense and feel the increasing tempo of the world. First, it was steam and the engineers that invaded the realm of jack-tar and his nautical hierarchy, changing all concepts of sea-born transportation - then came "Sparks" to further upset the insular domain of the shell-backs.

"Sparks" it might be explained for the benefit of the layman or those unacquainted with the lore of the sea, was the appellation which was unceremoniously bestowed upon the "Marconi-men" and the wireless-operators, in much the same manner that the name "Skipper" or "Old Man" was applied to the Captain and "Chips" for the ship's carpenter; "Chief" for the Chief Engineer, ad infinitum in sailorese.

It was to take Sparks a few years before he could come into his own, as early day wireless, at best, was not much more than a fascinating gadget or novelty - primitive and not fully dependable. It was little wonder that captains or officers as well as shipping interests took a cautious view of this new "toy". The contributions of Fleming and De Forest to the electronic art plus a number of fearsome marine disasters or near-tragedies at last projected the new art of wireless and elevated it as an acceptable tool and service in providing safety in breaking the barriers of silence with the outside world, once a ship had left its dock and laid a course for distant ports.

Individuals who became interested in the new art were generally speaking, from the younger generation and when they started on their sea-going careers, the "old salts" found it hard to refrain from playing every trick in the book on the young neophytes. Maturity took a bit of time for these mundivagant young argonauts, but as it does to all professions - time brought respect. Heritage is mostly experience, time and history. The pioneers and later the veterans "stuck to their keys" on many occasions when the flicker of their dash and dots held the safety of many lives at stake. Their courage in the face of danger and death has been told and retold many times. I am proud of the name "Sparks"!

**Saga of the Wireless**

The Saga of "Wireless" can probably be divided into three separate periods, the first starting with Guglielmo Marchese Marconi who was born at Bologna, Italy April 25th, 1874 and who electrified the world in 1901 when he transmitted the first trans-oceanic signal from Poldhu, Cornwall to St. Johns, Newfoundland, through the pioneer years when radiograms were first sent from ship to shore in 1904 until the White Star Liner H.M.S. Titanic tragically sank at sea with a loss of 1503 lives in 1912.

The Second Era- which we will call the "GOLDEN AGE OF WIRELESS" found the art maturing into an acceptable and useful utility, recognized by all nations and by most segments of industry, as an extremely useful tool for safety and to carry on their operations. It thus became a sea-going necessity. This period extended roughly from 1912 until the late "twenties" when much of the art had transitioned into what we today recognize broadly as "radio".

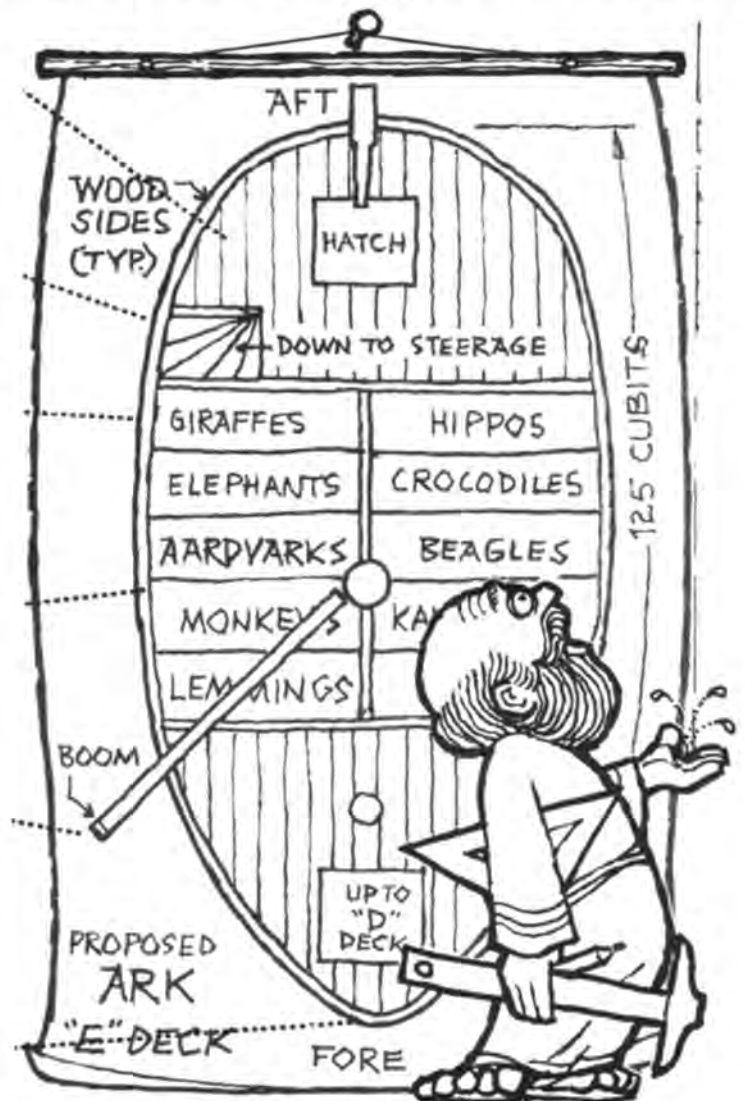
The very word "wireless" was simple terminology - intelligence was transmitted without the use of wires. Later, the word "radio" crept into our nomenclature, because of the connotation that transmissions were "radiated" energy. The United States Navy officially changed from wireless to radio in 1911. However, the name wireless was to continue for some time. Its epitaph was finally written when the Marconi Wireless Telegraph Co., of America bowed out October 17, 1919 and the Radio Corporation of America took over October 20, 1919 with Mr. Owen D. Young, Chairman of the Board, Mr. E. J. Nally, President and Mr. David Sarnoff, Managing Director of the new company.

The ranks of the early day pioneers, and also those who became attracted to the art in the "golden age" included not only men of genius, but many visionaries with a trunk-full of imagination, as well as the engineers who found the new invention and media an intriguing challenge. Many were attracted to it as... "a means to an end"... the "end" being to travel and see the world while at the same time being paid for their time and effort. The call of wireless spelled adventure and excitement. Listening in on a new world where elusive signals was the reward for patience brought a new thrill that few knew or understood.

The grim-reaper has taken most of the pioneers and the ranks of those who saw service in the "golden-age" is being rapidly thinned by the man with the scythe who is telegraphing "30" ahead to the appointed agent. Some of the old-timers have retired as millionaires and many have achieved glory and a place in history. Some have also retired broke and broken - however, as a group, I am sure they have collectively left the stamp of their colorful personalities on the world and their pioneering has changed the course of civilization more than most people realize.

**"What Hath God Wrought?"**

Wire telegraphy preceeded wireless telegraphy by some 57 years. Samuel F. B. Morse sent the words ...(sic)... "What hath God Wrought?" on May 24, 1844. The question has not been answered to this day! After Morse's invention had been perfected, an attempt was made in 1864 by the "Collins Overland Line", a subsidiary formed by Western Union, to run a line to Europe. This started in British Columbia, extended through Alaska, on to Siberia and across Russia. Western Union spent some three million dollars on the venture before abandoning the idea in



1867. Permanent cable connecting the old and new worlds across the Atlantic, was completed in 1866 and there have been few interruptions since. President Theodore Roosevelt participated in the first "round the world" relay of a telegraph message which was handled in the record time of nine minutes. That was fast time indeed for 1903. It was not until January 7, 1927 that commercial telephone by under-sea cable, was to link New York and London.

The field of cable communications was dominated by Cyrus Field in the decade from 1860's to 1870's with his Great Eastern Cables. The third trans-Atlantic cable completed in 1869, tied the United States and Great Britain even closer together with dependable communications.

### Who Invented Wireless?

While Marconi has rightfully been given greatest credit for the development of wireless, a Russian by the name of Aleksander Stepanovich Popov, demonstrated his wireless system to the Post Office Department in London during 1896. Development in those days was slow. Another scientist who has good claim as inventor of wireless is Mahlon Loomis who demonstrated his system in 1872 according to authentic records, and obtained a U. S. patent the same year. The Loomis Aerial Telegraph Company was approved by Congress in 1873 according to official records of the U. S. Government.

### Titanic Sinks - Wireless Comes of Age

The sinking of the White Star Liner, R.M.S. Titanic the night of April 14, 1912, focused world attention on wireless as a medium for safety - as nothing had ever done before or since. The stories of John George Phillips, Chief "Marconi-man" and his assistant Harold Bride have been told and retold countless times.

"Jack" Phillips had been an operator for about six years prior to his assignment to the new luxury liner. This was at the request of Commodore "EJ" Smith who was retiring, but who was asked by White Star to make the maiden-voyage on the Titanic to "top-off" his service-record with the line. Phillips had graduated from the Marconi School, or the "Tin Tabernacle" as the school at Seaforth was known, in March, 1906. Prior to his assignment to the Titanic, Jack had been assigned to the Teutonic, Pretorian and Oceanic of the White Star Line - then a

tour of duty at the Marconi high-power station at Clifden when the personal call came from Commodore Smith.

The writer spent several months (circa 1921) researching factual records of the Titanic's sinking and about this date wrote a story for Henry Dickow's "Pacific Radio News" which was published and which is probably one of the first authentic records of the disaster, from a wireless point of view. Since that time, I have noted many stories about the sinking of this great ship. Many have tried to "dramatize" and in so doing, have used the facts very "loosely" - in fact too much "mis-information" has been fed to the public about this tragic event. My original story was based on the transcripts of both the U. S. Senate's investigation which took place immediately after the landing of survivors in New York as well as the British Court of Inquiry's formal investigation at which Lord Mersey of Toxteth, presided.

### What are icebergs made of?

One of the "classics" in the U. S. Senate's investigation was a question asked by one of our "inland" senators (sic) "What is an iceberg made of?" to which the Fourth officer of the Carpathia replied with a straight face and simply ... "Ice"

This investigation started on April 19th, 1912, the day following the return of H.M.S. Carpathia to New York harbor with 714 survivors rescued by Captain Arthur Rostron and his crew. Marconi Operator, Harold Cotton of the Carpathia, was the man who alerted the Captain of the Titanic's tragedy. Records show that the Titanic struck at 11:40 PM. Operator Phillips put out his first call of CQD from "MGY" (The Titanic's call) repeated six times at 00:15 AM, however, Operator Cotton did not receive this initial distress signal as he had signed off watch at midnight after his official tour of duty had ended. It was only because of his intense interest and dedication to the art that he decided to give Phillips one last call prior to "turning-in". This he did in his underwear as his bunk was in the same room as the equipment. Phillips then quickly told him of the emergency and the rest is history.

The sinking of the Titanic is an epic thriller and a story that will kindle the imagination for years to come. It had an impact that has seldom been experienced in the annals of history -- especially maritime history. It was first page news for weeks in all the world's media. In my own home state of Colorado, I avidly read and followed every word the Denver Post and the Rocky Mountain News, and the state capitol newspapers printed on the disaster. It was the most sensational event that I had ever read and it fired my malleable young mind with the ambition to become a wireless operator. (Continued on Page 6)



**S.S. NORTHWESTERN - [AN-WAN] --- High and Dry !**

Picture from the collection of Joe Williamson, The Pacific Northwest's renown Marine Photographer. The picture was taken July 25 1933 of this legendary pioneer ship of Alaskan waters at Eagle River, Alaska -- "High and Dry" ! She was refloated a few days later with the aid of a high tide and a salvage vessel with little damage according to Jim Gibbs, our early Marine Historian. The Northwestern lived a 'charmed-life' surviving many 'close calls' with harsh weather and the uncharged rocks and reefs of Alaskan waters. Her 'first call' was a stranding on San Juan Island in 1910. Seventeen years later she was again stranded near Cape Mudge, B.C. on Dec. 11th 1927. She was refloated in 1928 after Alaska S.S. Co., spent a large sum to reclaim her. The Northwestern ended her career of a 'charmed-life' at Dutch Harbor, Alaska where she was placed in service during WW-II as a barracks-ship. During a shelling of Dutch Harbor by the Japanese, she sustained a direct hit amidships - but she still was afloat. Fortunately there were no casualties. "Ye Ed" got his first introduction to shipboard radio at station "AN" [WAN] aboard the Northwestern on a trip he made to Alaska before enlisting in the USN during WW-I. WAB

(Continued from Page 5)

Previous to this time, my boyish thoughts had been intrigued with the idea of becoming a station-agent on the Union Pacific or some great railroad, as the big engines and trains that thundered across Wyoming cast a lure, fascination and a strong hold on my adventurous spirit. One of the requirements of course was the knowledge of "Morse" code and aided by my good cousin Gene, I spent many hours sending Morse code back and forth from bunk-house to the main house on his ranch in Wyoming.



## THE SS. TITANIC

The Titanic changed all that! I promptly changed from "Morse" to "Continental code". Also, without delay, I drew on my allowance for an order to A. B. Duck and Company for some long wave couplers, tuning coils, etc. I can still recall the thrill when I first tuned in "POZ" of Nauen, Germany on about 12,600 meters. This was from an antenna that I had run from a large cottonwood tree for about a half block to the top of our high gabled barn. Other stations I recall copying, at the time were "YN" Lyons, France on 15,500; MUU from England on 11,500 meters. Thus, it will be noted that the sinking of the Titanic had a very marked influence on my own life. I might add parenthetically, that lightning hit the cottonwood tree which secured one end of my antenna, so my receiver was put out of commission - a real tragedy.

### Colorado loses a Native Son

### U.S. Navy gains a "boot"

Living in Colorado during this period could be quite frustrating however, as there wasn't much activity or even interest in the new art. The war (WW-1) was to come along, however in short time and I volunteered for service in the United States Navy, even if I had to do a bit of fudging on my age for Uncle Samuel to accept me. I was quickly assigned to Mare Island and then Bremerton Navy Yard where I was assigned to the signal school which included not only the Continental Code but Wig-Wag and semaphore signaling, as well. My first ship was the U.S.S. West Hosokie in 1918 with a trip to the West Coast of South America and then to the Gulf and Europe. It was at Clinta Buena, Chile that a German boarding party tried to take over our ship one dark night, shortly after dark. Fortunately for us, we spotted them coming and turned our big searchlight on their boats about the time they were along-side and foiled them ... good!

I was mustered out of the Navy from the Navy Station at Algiers (NAT) across the river from New Orleans. After a short visit home, I enrolled in the Marconi Wireless Institute in the Call Building, San Francisco, under the able direction and guidance of Jack Michie, to brush up on commercial requirements for a



**FIRST PICNIC OF THE WIRELESS PIONEERS - 1968.** Frank Geisel (Membership Chairman), left, and Bill Breniman (Executive Director), right. The "FIRST" edition of "PORTS O' CALL" had been printed. It has long since become a collector's item. Picnic was on the grounds of the late Captain Dollar estate in Walnut Creek, California.

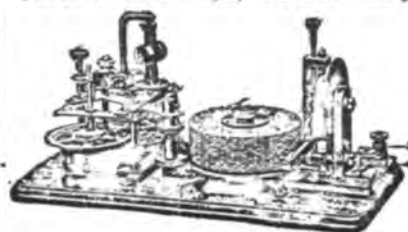
Frank Geisel [Left] became a Silent Key on July 12 1984. He served as Secretary after organizing in 1968 and later became our Second President. Frank had a long career - starting as marine operator and then at Station KPH where he became Chief Operator and then many years as Manager. Frank was a 'top' code man and a very wonderful person to know. He served the Society in a dedicated way

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license. Bernard Linden, who was later to become a very good friend as Inspector in Los Angeles, gave me my initial test which I passed with ease, although I will have to admit that "omnigraph" was about as "jerky" as they can get. Major Dillon signed my First Grade License on June 10, 1919 and ... I was ready for a life of adventure and travel!

### Assignment WRT - Queen of the Pacific?

One week later I was aboard the Pacific Mail (Liner) George W. Elder headed for Panama with a "balky" HALCON transmitter. This was my initiation into commercial wireless. The pay was \$60.00 per month and included assignment as purser and freight-clerk along with a minimal amount of "wireless work". When I arrived back in San Francisco, the operating company was not able to pay me immediately, so I landed on the beach sans job and money. Two days later, my immediate problem was solved, however as I was northbound on a steamschooner - the J. B. Stetson. Marconi Wireless Office (L. Malerin) had signed me on and I was "eating" again.



Joe Hallock rode this "Rocking Chair" in 1911. Bill Breniman in 1919 with many legendary R/O's in between. A fold-up bed over the operating table plus sending/receiving equipment in a Peewee cabin 6x9 was the 'lux' quarters of this sardine can. "Small is Beautiful!" No extra charge for the 'roller-coaster' ride over the waves with a little yo-yo action and gee-hawing thrown in for good measure. Many R/O's got their 'sea-legs' riding these lumber boats and were awarded a PhD (or equivalent) for ability to condition and stabilize their stomachs to the vagaries of wind and waves. If you passed the 'Steam-Schooner' test -- you had it made!

The sinking of the Titanic spotlighted wireless as the most important service that could be provided from the standpoint of safety and communication between ship and shore since great ocean greyhounds started their race for the coveted "Blue-Riband". Awareness of the potential of "wireless" was to leave its imprint on history in 1909 when the S. S. Republic with an old-timer Jack Binns at the key after logging 41 trips across the Atlantic, was to send out the "CQD" distress signal after his ship was rammed by the Italian Liner Florida with over two thousand aboard, mostly immigrants from Italy on their way to America, hoping to carve out a new future. The distress signal was picked up by A. H. Ginman at the Siasconset land station on the South shore of Nantucket Island and he was instrumental in alerting the Steamers La Lorraine of the French Line, Lucania of Cunard and the Baltic of the White Star Line. Rescue of the passengers from the sinking Republic and later the Florida, some by the La Lorraine and Lucania but mostly by the Baltic is one of the great epics of the sea. Approximately 1600 passengers and crew were transferred by small boat to the Baltic in ten hours without the loss of a human life, which still remains one of the happier maritime records.

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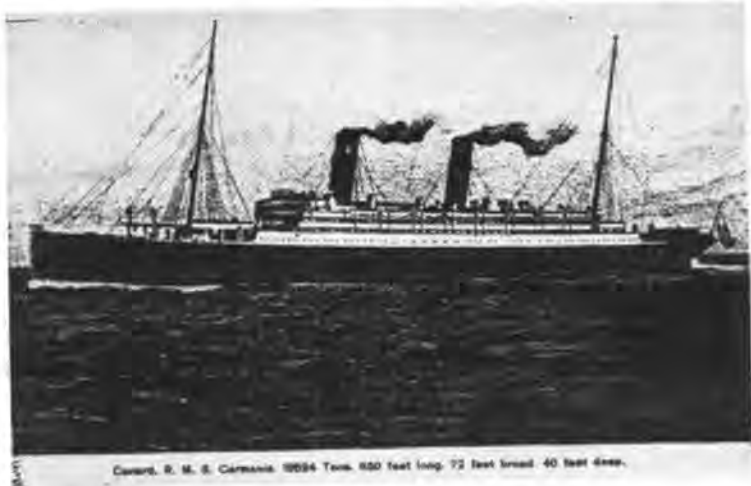


**Fire at Sea - SOS Saves 521 in dramatic Rescue**



A little over one year after the Titanic sank, the dreadful word "FIRE" was flashed from the Liner Volturno of the Royal Line by Seldon on Oct. 10, 1913. The Volturno was carrying 657 souls aboard when fire was discovered in latitude 49-12 North and longitude 35-51 West. Coming as it did at the time of the first Convention of Safety of Life at Sea, following the sinking of the Titanic, it added considerable impact to the importance of the meeting being held in London.

The rescue of most of the passengers and crew of the burning Volturno was in itself a classic of sea bravery and rescue. The "SOS CQD FIRE" flashed by Operator Seldon resulted in nearly a dozen ships answering his call. Among those responding - and many have since gone on to a place in the history of wireless include P. B. Maltby of the Cunarder Carmania; Operator Gericke of the German Liner Grosser Kurfurst; Operator Reich of the German Liner Geydlitz; H. P. Hunt from the Atlantic Transport Liner Minneapolis; Dan O'Sullivan of Furness Withy Line's SS Rappahannock; J. H. Jeppesen of IMM Liner Kroonland; Operator Quevillon of the French Line's La Touraine; Joe L. Cannon of the SS Birma and T. G. Ward of the Oil Tanker Narragansett.



Commander, R. M. S. Carmania. 18934 Tonn. 850 feet long. 72 feet broad. 40 feet deep.

Extremely heavy seas were running when the rescue vessels reached the burning Volturno and it was realized that those aboard the ship could not be saved in such high seas. It was then that the Captain of the Carmania requested the Captain of the tanker Narragansett to steam to windward and pump oil overboard to calm the gigantic waves so that small boats could be lowered into the maelstrom. This was the first time that an operation on this scale had ever been attempted and it was successful. Over 521 lives were saved from the burning liner, mostly by members of the crew of the Carmania who manned the small boats and performed this heroic feat which will long remain one of the classics of the North Atlantic.

**"Convention for Safety of Life at Sea"**

The first "Convention for Safety of Life at Sea", as mentioned previously resulted in many changes in maritime rules and regulations. One of the most significant, as far as wireless was concerned was inauguration of compulsory 24-hour watch on all passenger ships while at sea. Another change was the adoption of "SOS" as the one and only distress signal. The use of Continental code only was another change which was written into the records. Range of wireless equipment and the use of emergency equipment were also spelled out.

**Changes bring safety to Those at Sea**

The foregoing affected wireless, however many other significant changes were also made for the safety of passengers and crews in other. When the Titanic sank there were only 16 lifeboats for the total capacity of passengers and crew which could run over three thousand. This was adequate for only a third of those on board. However, in 1912 (with an unsinkable ship) this filled the requirements and laws of the day. The ocean-routes and sea-lanes across the north Atlantic were moved much further South to avoid the potential of ice-bergs, at least during the few months they become a menace to steamship lanes. Formation of the Ice Patrol for the spotting of ice-bergs and flows, and charting of their movements was made without delay. Life-boat drills became a requirement for the first time and in general maritime, laws and regulations were tightened.

A simple device which is now installed on most ships -- the Automatic Alarm which responds to the impulses of an S-O-S signal would probably have saved all the lives on the Titanic, had such an invention been known of and used in those days -- unfortunately, this was far in the future of the art.

It may be recalled that the S. S. Californian of the Leland Line "hove-to" for the night within about ten miles of the spot the H.M.S. Titanic hit. This, to await daylight as the ship was surrounded by large bergs. It was the operator on the S.S. Californian that had warned Phillips about the bergs and his call was acknowledged. The last calls of Operator Evans of the Californian had met with a rather curt "QRT" (shut up) from Phillips who was bogged down with messages to and from Cape Race (CR). The Millionaire-Liner as the Titanic had been dubbed, was swamped with traffic and the Marconi-men were really getting a work-out on this maiden voyage. Since Operator Evans had completed his watch, he turned the equipment off and went to bed. Had he remained on duty, but a few more minutes longer, he might have been able to have relayed the information to Captain Stanley Lord, that would have resulted in the Californian reaching the Titanic before she plunged into the deep with 1503 souls on this "unsinkable" ship.



George Farmer, one of the pioneers of early wireless days in his book "56 YEARS OF WIRELESS" published in April, 1963, with some nostalgic reminiscing of bygone days of the San Francisco waterfront, says of the writer ... (sic) ... "Remember Bill Breniman who broke some sort of record when he sailed on 52 different ships during his career of wireless operating?". George's total was somewhat on the high-side as the number was 32, however it probably reflects the experience of many old-timers in these "ship-hopping" early days. I can recall arriving in "Frisco" (we now call it San Francisco) about 9AM from a trip up coast. At 1:30 PM the same day, I was outbound through the Golden Gate, assigned to another ship. During the 4½ hours in San Francisco, I had signed off one payroll, cleared my abstracts with the Marconi office, signed on for a "deep-water" trip before the Shipping Commissioner, transferred gear plus bought supplies for a three or four month's trip. Don't recall if this left time to grab a bite or not. Jobs were so plentiful in those days that the operators did not seem to object to these frequent changes. This was of course to carry out the objective of "seeing the world" ... even if a bit of it was through a port hole!

**My "Sine" was "CX"**

Wireless operators are usually known over the air by their "sine". In my case I had selected "CX" as it was the stock-exchange code abbreviation for the railroad that ran through my old home town in Colorado, ie: Colorado and Southern Railway. It was by strange coincidence that I found Lawrence Malarin using the same sine. Larry was the "big-wheel" at Marconi and I was afraid he might object, but he didn't. "LM", as we knew him was a very fine man, liked by the fraternity. The Marconi Wireless Telegraph Company of America never had a better representative as their District Manager, unless it was Richard "Dick" Johnstone who became Chief Operator and then took over Malarine's position as District Manager of RMCA when he went on to better positions.

**"Dick" Johnston ( RJ ) - my Mentor**

Dick, at the time I first met him was Marine Storekeeper at 109 Stewart Street, San Francisco. A real "square-shooter" and one of the best liked and most respected men that ever worked for RMCA on the West Coast. He had a fine way with men and a razor sharp mind that recalled much of the history of wireless and marine history. This perhaps was inherited to some extent as his father was one of the West Coast's best known skippers, so it came quite natural that Dick enjoyed a background knowledge about ships and things nautical that few of us "landlubbers" knew about. Later, Dick was to publish one of the most authentic accounts of marine history pertaining to the West Coast in his book titled ... "My San Francisco Story of the Waterfront and the Wireless". This was printed in 1965 by one of the real old time ship operators - Earle Wohler. Earl, incidentally was one of the early day pioneers in the amateur radio field with call W6FS. Dick's book, a limited edition, quickly sold out.

(Continued on Page 8)



(Continued Next Page)

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### "Call me Sparks"



When we talk about being "on the beach" it normally means "waiting for a new assignment". During these periods we would spend much of our time in the "Static Room" of the operating companies. This is the name given to space set aside next door to the Chief Operator's office and set aside for his convenience in calling an operator when needed. Most of the companies used the seniority system for assignments and the operator next up would likely spend most of the day waiting for ... the call. Indeed, most of the operators in port or on the beach would spend considerable time in the static rooms just passing time of day or as we used to say "eyeball-qsoing" with other ops. I can recall an amusing incident that occurred after docking one trip when I called on Larry Malarin to clear my abstracts.

### Trans - Pacific Radio Operator's Log

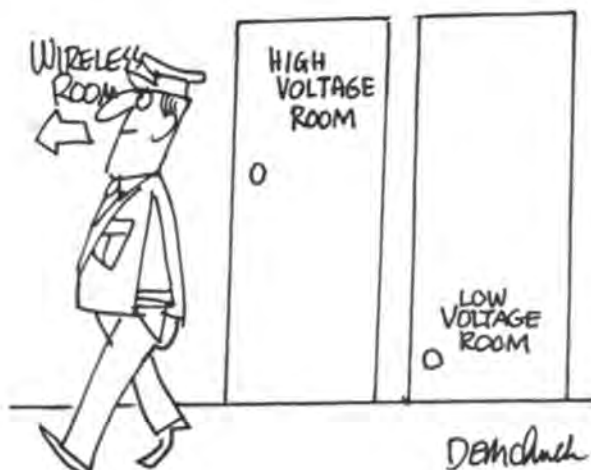
Prefacing the anecdote, I must mention that I had published a booklet in November, 1920 which was titled ... "THE TRANS-PACIFIC RADIO OPERATOR'S LOG". This gave a resume of stations, particularly in the Orient covering conditions and coverage on the Trans-Pacific run plus many tid-bits of X's and Strays that would be of interest to an operator making the trip for the first time. I distributed about five thousand copies of my booklet as a consequence, my name was quite well known to operators over the world, especially in wireless circles.

On this occasion, when I walked into the static room, a group of ops were busy "shooting the breeze" as usual. I knocked at Larry's door, but he was busy at the moment so I returned to the static room. I guess my ears stood up a bit as these chaps (I had never met any of them before) started to talk about my book. One of them, possibly to be impressive told the others that he knew Breniman real well ... in fact almost "buddy-buddies" one might say. About this time LM came to the door and said ... "Okay, come on in Breniman". I never looked back to see the look on the face of the op who knew me so well. When I left the office, they had discretely departed!

### The "Dog-House" on Pine Street

The Alpine Hotel, 480 Pine Street, San Francisco was another "gathering place" for the clan. Harry Hiltner, clerk at the Alpine, probably knew more operators than anyone on the West Coast. The Alpine has long since passed into history as it has been razed to make way for the new Bank of America Building which will be the largest building on the West Coast, according to reports. (1985, now finished)

Harry has long since passed over the bar also. His kindness to the operating fraternity is legend. You could always depend upon Harry to mail some of your gear or clothes to you if you needed it at distant ports. Or if you received a call from some Chief Operator and had to make a "shoe-string" dash for some ship and didn't have time to go by the hotel and pick up your gear - a call would insure it being taken care of. Harry also provided copies of the "Shipping Guide" for all of us to check daily. These were posted in the lobby where we could sit down in easy chairs and it would not take long until we would have quite a gathering of the fraternity. Problems of the day were taken care of, then we would review other favorites such as



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ships ... whether they fed good or were "hungry" ... quarters aboard ... what kind of skipper and crew? ... what kind of wireless gear was provided ... et cetera. Of course the Operating Companies, their Chief Operators and personnel were always prime subjects of conversation ... and of course the Ports of the world came in for intimate review and checking. The subject of "Weather" was also one that found its way into any lengthy bull-session as it was perhaps one of the elements that would sooner or later concern us most.

### The China Run

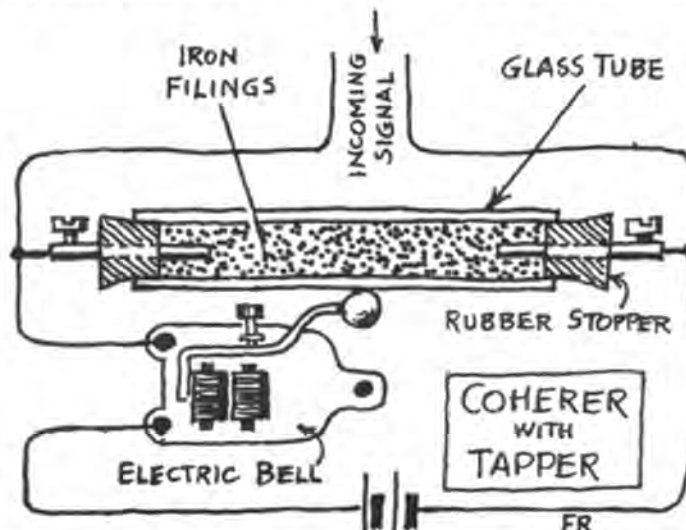
Operators on the China run used to talk about the typhoons they had encountered and we listened in awe to some of the tales they used to spin -- mostly true, but often embellished -- at least slightly. While it may seem a bit strange, the larger passenger liners often took more of a beating from a typhoon than an oil tanker or cargo ship, especially if loaded to the plimbsol mark. It was simply because the passenger ship rode higher in the water and there was more superstructure above the water line to catch the wind. The dreaded name typhoon is derived from the Chinese word "ty" (great) and "fung" (wind). The "great-winds" of the typhoon generally form in Western Pacific in the general area of the Marianas. While typhoons can be expected at any month of the year, they usually reach their peak in expectancy from August to November.

The lowest barometric pressure ever recorded was during a typhoon which swept over the Island of Luzon in August, 1927 at which time the barometer fell to 26.185 inches of mercury. A favorite story told by mariners, concerns a Second Mate who bought a new barometer in Hong Kong to replace one that had been giving trouble. The Second Mate mounted the glass in the chart house but after watching it a couple days with extremely low readings, decided that it also, was inaccurate so returned it shore-side. When he tried to return to his ship, it had disappeared. The big typhoon his "glass" had warned him about had hit and sank his ship in the harbor.

### "Typhoon Alley"

"Typhoon-Alley" runs from the Mariana Islands, across the Philippine Sea to the Philippines, then pivots northwestward in the South China Sea and gradually turns North-North East across Japan, skirting China along the shore from Hong Kong to Shanghai. During "typhoon-season" skippers are "jumpy" about their weather and usually work "Sparks" overtime to obtain weather reports from "JCS" Chosie (near Yokohama); "JOS" Osezaki on the Goto Islands (near Nagasaki); "JOC" Otchishi (Kural Islands) or "JJC" at Funabashi. These stations and a number of others sent coded weather at least twice daily following time signals. The first number of the 15-figure code was the most important. If it showed figure "1" it meant a moderate storm was in progress while if the number was "2" it alerted all mariners to a typhoon.

Waves generated by violent typhoons sometimes reach enormous size, however the real "grand-daddy" of them all are the "Graybeards" of the "Roaring-Forties" of the low latitudes in the Southern Hemisphere. Operators on the Australia and New Zealand run, and those who have rounded Cape Horn or Cape of Good Hope occasion-





# A Wild Day On The Atlantic

## CAMERA ON THE JOB

Unusual shot of the Atlantic on the rampage off Miami taken by Society member T.W. Braidwood [ 2864-SGP ] in 1935 while on the Socony-Vacuum Tanker "VACUUM" (KUTS) as taken from the deck looking aft.



(Continued from Page 8)

ally had the misfortune of becoming a pawn in the rampage of nature where the crests of some waves measure a thousand feet across and from 80 to 100 feet in height. We cannot realize the destructive power of mother nature until we have been through some of these awesome displays of rampaging force and black fury. One of the greatest fascinations of going to sea, is the gradual appreciation one learns to hold for the change in the elements -- that a tranquil mill-pond can explode in a few hours to a rampaging force that will challenge our very existence. While we admit we have been concerned and even a bit scared, we also have to marvel at the majesty and infernal beauty of nature -- wild and raw!

The storms which have perhaps caused the greatest loss of life on earth, have been the "killer" typhoons of the Bay of Bengal. Fortunately not many large ships have been lost, however the loss of life ashore has been catastrophic on many occasions and loss of small craft has run into the thousands. For example, a violent typhoon on Oct. 7, 1737 accompanied by a 45-foot wave was recorded as having drowned nearly a third of a million people when it swept inland at the mouth of the Hooghly River which carries sea traffic to Calcutta. A giant tidal wave which swept ashore in Bengal in 1942 as the result of a typhoon, covered an area of over five thousand square miles with a wall of water thirty feet high - an area greater than the size of Rhode Island and Delaware combined. Another typhoon as recent as 1965 was reported to have killed over 13,000 in the area. This tragic loss of life has probably been due to the funnel-like shape of the Bay of Bengal, especially near the mouth of the Hooghly River and the venturi effect it has on wind and sea.






Most operators have one storm they went through that is "THE" "grand-daddy" of them all. Curiously enough, in my case, it wasn't a typhoon in the Orient or a hurricane of the West Indies, although I have been through several, but a storm off the West Coast of lower Mexico which we call the "coffee-coast" that for sheer ferocity had everything topped that I had ever been through.




## Beware the Tehautepecers

Normally you think of these waters as being quite calm, however most operators and mariners are acquainted with these storms which are called "Tehautepecer's". They are violent north winds which blow across the Isthmus of Tehautepec and then range to sea for a hundred miles or so. The Tehautepecer's are caused by pressure from polar areas which create great winds that surge across the Gulf of Mexico and are squeezed in a funnel effect through the Gulf of Tehautepec at gale force. The writer was caught in one of these fierce storms while aboard the S.S. West Hosokie which was in ballast bound for Callao Peru from San Pedro, Calif. in 1918. At least five ships sent out "SOS" calls during the storm, but we were powerless to aid any of them as we had our own problems. Being in ballast, we bounced around like a cork. The high waves and spindrift had washed our lifeboats overboard and had caught some of the planking on the forward holds. We also lost our anchor. Finally the sea abated and we were able to continue, however we could not contact any of the ships as our antenna had also blown away. When an emergency antenna was finally erected, the Navy Station at Coco Solo was advised.

One of the most spectacular phenomenas of nature that will vividly etch itself in the memory of all who see it, is the water-spout. This is somewhat similar to a tornado but occurs over water in tropical or semi-tropical seas. On one trip of the S.S. Santa Cruz while bound for Calcutta from Singapore, we observed over twenty waterspouts simultaneously while passing up the Straits of Mallaca near the northern tip of Sumatra and as we entered the Andaman Sea. We had often heard tales of sailing ships being "caught" by these waterspouts with tragic results as the ship would break the vacuum of the vortex and thousands of tons of water would cascade to the deck and many times sink them. Cannon would be mounted forward and shots fired into the waterspouts that came dangerously close. The cannon balls would pierce the vacuum, causing water to fall and save the ship. This is a tale often told but I could never verify it and while I have heard it argued "pro and con" for years, by old salts, I could never find anything very substantial to authenticate the "yarn".

## Uncle Joe's Bedtime Story

Once upon a Time a Great Big  Oil Tanker was loading Fuel Oil which is Nasty Black Gooley Stuff. A Big Man  called a Mate was in charge. Another Big Old Man  called a Wharfman was Pumping the Oil aboard with a Tiny Weenie Pump . The Wharfman got Tired of using the Tiny Weenie Pump and started to use a Great Big Pump . The Oil came MUCH faster and What do You Think Happened? That's Right, the Tank Spilled Over and the Mate found a Lot of Nasty Black Gooley Stuff up around his Knees

That made the Mate Very Unhappy and Besides it ruined HIS PANTS . It took a Lot of People a Long Time to Clean up All the Nasty Black Gooley Stuff  and when the Mate saw this and had another look at His PANTS  he decided he would NEVER let another tank Spill Over. Especially if he was Standing Beside It.

— MORAL —

You can never tell what some bird in a pumphouse a mile away is going to do, so watch all tanks being loaded.

## The Restless Atmosphere

"Wind and Tide" have become so important in the lives of most wireless men that it is little wonder that they have become quite expert on the subject of meteorology, at least the practical kind. If you spoke of Aeolus, we would know that you were talking about the "King of the Winds". We also know that Aeolus had at one time confined all of the winds in a cave on Mount Haemus in Thrace. These included Boreas, the North Wind; Notus the South Wind; Eurus the East Winds and Zephyrus the West Wind. Greek mythology reports that Aeolus once tied up all the winds in a bag and presented them to Ulysses so that he might use them to fill his sails. Unwittingly, however, one of the crew (second mate no doubt) gave them their irrevocable freedom and mankind has never been able to control them to this day -- they have been a first-class headache to operators and mariners ever since. The job of the wireless operator would indeed have been made much easier if Aeolus had observed a little more care.



(Continued from Page 9)

### "Call me Sparks"

This makes a good story and one that students of Greek mythology will no doubt appreciate. We know of course also that the U.S. Weather Bureau had some sort of mandate to report on the capriciousness of Aeolus et al, so arrangements were made for ships to send their local weather reports in, via radio so that off-shore reports could be used in their prognostications.

These reports were usually made up by the Second Mate aboard ship and a small stipend was paid for each report. Normally, it would take fifteen to twenty minutes to make up and write the report out - then it was handed to "Sparks" who sometimes stayed up five to ten hours to try and clear it from his hook, so could you blame him if he felt that he was entitled to part of the stipend? Anyway, this was one of the long-standing "tiffs" of the wireless men.

Wireless men who have sailed most of the seven-seas and visited many of the world's ports have become familiar at first hand with Aeolus's handmaidens. Operators to the Mediterranean are familiar with the "Sirocco" which often loads the ship with dust from the Saharra. A similar type of wind which blows across River Plate ports is called "Pampero Sucio". The "Mistral" is another wind those who cruise to France or Italy are well acquainted. It belts down from the north with damaging violence from Marseilles on the West Coast of Normandy to Barcelona and Genoa in the Balearic Sea. I had first hand experience in the Bay of Biscay where a cousin of the Mistral called "Cierzo" kicked up a constant angry sea which made it rough for us on destroyers.

Operators on the run to Australia and New Zealand are well acquainted with the counterpart of the Sirocco. In the "land down under" it is called the "Brickfielder" and sometimes the dust is so thick one cannot see over a few feet. Adding to the discomfort of the Brickfielder, is usually high temperatures which run 100° or higher. These are usually experienced on the South Coast of Australia during their summer months when winds from the dry interior, carry dust and high temperatures far to sea.

The mood, the feel, the love for the sea does not come with the first trip. The indefinable attachment and affinity for the sea grows with association and experience and the appreciation one must have for nature and respect for the elements. We say an old mariner shellback has "salt water in his veins", but it merely reflects the spell that the sea has cast over mariners who have lived too long in the realm of King Neptune.

Few can realize how relaxing it can be to go out on deck after a hectic evening of trying to clear the hook of a lone position report which we sent daily so that the owners and relatives of the crew will know where to pin point us on the broad wastes of the ocean. These reported were called "TR" (reports) and were published by most newspapers in port terminals. After getting the usual "R" which means acknowledgement from the coast station at KPH or FFS, we would go out and enjoy the soft winds under the canopy of stars which seem so close you could almost touch them.

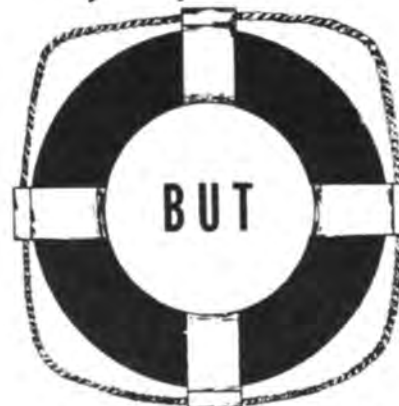
### Story of the "TR"

The Continental Code for "TR" is internationally used to report the position of a ship on its voyage and generally sent daily after 8PM. The International abbreviation QTF means essentially the same but is used for radio compass bearings mostly. "TR's" sent to shore stations w/o charge are printed (or were) in most coastal newspapers of any size to keep the operating company and relatives of crew members informed. The "TR" reports below were clipped in 1927 by a relative of "Ye Ancient Mariner" on his voyage from Los Angeles harbor to Auckland New Zealand which took about 30 days at speed of 8 knots. It is incomplete but gives an idea of the usage made of "TR's" in those days of nearly sixty years ago.

WEST HENSHAW, Los Angeles for Auckland, 247 miles southwest of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 2713 miles southwest of Los Angeles.
WEST HENSHAW, Los Angeles for Auckland, 487 miles southwest of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 1265 miles southwest of Los Angeles.
WEST HENSHAW, Los Angeles for Auckland, 127 miles southwest of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 2215 miles southwest of Los Angeles.
WEST HENSHAW, Los Angeles for Auckland, 872 miles southwest of Los Angeles.	UTACARBON, Counts for Los Angeles, 1605 miles southwest of Los Angeles.
WEST HENSHAW, Los Angeles for Auckland, 1210 miles southwest of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 1115 miles southwest of Los Angeles.
WEST HENSHAW, Los Angeles for Auckland, 1488 miles west of Los Angeles.	OLIVA, San Francisco for Auckland, 1890 miles southwest of San Francisco.
WEST HENSHAW, Los Angeles for Auckland, 1181 miles west of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 2707 miles southwest of Los Angeles.
OAKRIDGE, Pacific for Auckland, 5080 miles.	PRESIDENT POLK, Balboa for Los Angeles, 800 miles southwest of Los Angeles.
WEST HENSHAW, Los Angeles for Auckland, 1841 miles west of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 1748 miles southwest of Auckland.
WEST HENSHAW, Los Angeles for Auckland, 2212 miles west of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 1628 miles southwest of Los Angeles.
WEST HENSHAW, Los Angeles for Auckland, 2241 miles southwest of Los Angeles.	PRESIDENT ADAM, New York for Los Angeles, 28 miles southeast of New York.
WEST HENSHAW, Los Angeles for Auckland, 2212 miles west of Los Angeles.	WEST HENSHAW, Los Angeles for Auckland, 1208 miles west of Auckland.
WEST HENSHAW, Los Angeles for Auckland, 2212 miles west of Los Angeles.	PRESIDENT POLK, New York for Los Angeles, 28 miles southeast of New York.

### Life Preservers. . .

You May Only Need It Once,



If You Don't Have It You May Never Need It Again

Published by the USCG in its 'Notice to Mariner' circa 1972, to inform the public ... "Don't leave port without them" (especially on small craft).

### Shipboard Tranquility

We would often lean over the rail for hours on end and watch the prow cut through the waves, setting up a wake that trails into infinity. Sometimes we would flush a school of flying fish that would plane across the waves for great distances before they would drop back into some beckoning crest. Dolphins would pace the ship for hours as if to challenge us for a race. Sometimes we witness a water phenomena created by minute fluorescent life that cause all sea movement to glow at night. This usually occurs in tropical waters. Sometimes it brings chills as we watch the outline of large forms that we know are man-eating sharks silently trailing our ship for hours for food likely to be dumped overboard by the cook after chow.

The flight of terns, the stormy petrels which we call "Mother Carey's Chickens" and other birds of passage intrigue us as does the albatross that wings its silent course off our beam for long periods without rest. Sea-gulls by the thousands call their noisy welcome as we near port or pass friendly islands.



LEFT: Picture of "Ye Ed" on the SS Rotarian/KDCF taken in Seattle by SOWP member Jim Caldwell - 10-SGP. "Ye Ed" made 3 trips around South America on the Rotarian, RIGHT: Picture shows H.E. Yankee who relieved "Ye Ed" circa 1922 on the Rotarian. KDCF was renamed SS Condor. Operated by Moore-McCormick SS Company.



S.S. WEST HENSHAW - KEBQ - Docked at Wellington, New Zealand. "Ye Ed" made 5 trips on her 'down-under' in 1926 and 1927, visiting Australian and N.Z. Ports.

(Continued on Page 11)

Once on the Tyrrhenian Sea, enroute from Port Said for Genoa we were invaded by a large flock of swallows that found roost and overnight sanctuary on the steam-pipes in one of the passage ways of our ship. They took off early the next morning probably for the shores of Italy, as silently as they had arrived. Another time while enroute Suez from Singapore, we played host to a great buzzard who came aboard near Aden and rode on top of the ship's mast for a day or so while we transited the Red Sea.

**Eerie Lights of our Firmament**

A rare phenomenon reserved and privileged for those who sail the tropics, is a glow or corona that lights up the masts and rigging of the ship with an erie effect known as "Saint Elmo's Fire." It usually occurs during thunderstorm conditions and in effect is a corona discharge that draws lightning out of supercharged air to the ship which acts as a ground. Sailors normally consider this a good omen and a manifestation of a visitation of their patron saint, Elmo (Erasmus). I have seen this mostly in the tropics but also several times in the Mediterranean.

Crossing the North Atlantic or the great spaces of the North Pacific, we would occasionally catch a view of the "Northern Lights" if we were fortunate enough to be out from under the cover of clouds or fog. The Northern Lights are called the Aurora Borealis in the Northern Hemisphere and their counterpart toward the South Pole is known as the Aurora Australis. This weird display of errie shimmering light, when viewed from a lonely vigil in the high latitudes, usually has a profound effect on the land-lubber who sees it for the first time.

Its mysterious patterns of light are ever changing in shape, color and intensity as it lights up the Northern Heavens or for those sailing the "roaring forties" the Southern Skies. Great arcs banding across the sky with streamers that shoot to great heights are the backdrops for piercing rays that sometimes appear as a giant searchlight pointed by Diogenes, perhaps looking for his honest man? We feel we are sitting alone in a theatre of the heavens watching God's Thaumaturgy being presented on a huge stage and we are fascinated while at the same time a feeling of awe and apprehension stirs within us. This unearthly ghostly parade is nature's answer to our present day color television spectacular and it plays all channels.

While man has not satisfied himself with all the ramifications of the aurora, it seems fairly well established that it is related to magnetic storms and the influx of charged particles from the sun in the higher atmosphere attracted toward polar areas. It has been observed that the aurora is most intense at the time of greatest sunspot activity which also relate in cycle patterns of the sun's rotation every twenty seven days. Scientists have determined that the aurora lights occur usually from 50 to 150 miles above the earth's surface, however, they have been measured as high as 600 miles which shows that some of earth's atmosphere exists at even this elevation. Radio men usually have a rough-time during the period of Northern Lights, especially on the older ship-frequencies and before the day of high-frequency communications. It was often difficult, if not impossible to clear traffic during periods of greatest activity. The HF is also affected by the aurora.

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**TO THE LATE "S O S" HEROES**

By E.D.Perry, S.S. "CELILO" - WMF

Suppose you were "listening-in,"  
 In the wee small hours before dawn,  
 When the air was as clear as a whistle,  
 And the "sigs" were coming in strong,  
 You hear someone sending press "dope,"  
 And perhaps a liner or two.  
 Perhaps you are thinking of your dear ones,  
 And wondering if they're thinking of you.  
 You happen to look out the port hole,  
 The sea is rising fast.  
 You hear some steamer's signal,  
 As she goes hurrying past.  
 Then all at once there's a terrible crash,  
 You are thrown from your chair  
 to the floor,  
 You pick yourself up and glance about,  
 When the Captain appears at the door.  
 "Send out the distress call," he orders,  
 "We've struck and we're sinking fast."  
 You calmly send out the S. O. S.  
 And are ready to stick till the last.  
 You hear the order, "Man the boats,"  
 You hear them pull from the side,  
 But you're waiting the answer to your S. O. S.  
 As the ship settles down in the tide.  
 Perhaps they were told to leave in time,  
 They perhaps had the Captin's permission,  
 But both of the boys stuck by their ship.  
 And upheld the "Marconi tradition."  
 There must be a place in heaven,  
 For heroes such as they,  
 Who stick by their ship to call for help,  
 And go to a grave in the sea.

**ST. ELMO'S FIRE:  
 NATURE'S WARNING LIGHT**



It's a little scary when it suddenly appears, strange flickering, a tongue of fire snake-dancing atop the masthead, a blue-white flame leaping about like a ping-pong ball on a water jet in a shooting gallery.

This is the phenomenon known as St. Elmo's Fire, which many mariners still refer to as "nature's warning light," because it usually forewarns of stormy weather.

St. Elmo's Fire had its origin in the tales of ancient Mediterranean sailors. Early sea-going Greeks worshipped the luminescent, bluish-white lights when seen in the tall riggings of their ships, as the Greek Gods, Castor and Pollux.



The Greek mariners developed a sacrificial ceremony to these gods, performed each time they put to sea, and this brought them (or so they believed) favorable winds and seas. Two tongues of fire—Castor and Pollux—insured good fortune, but one flame only was a hex.

Later, across the Ionian Sea, in Italy, another legend developed to explain the mystical, luminous flame. The tale had St. Erasmus, patron saint of Mediterranean sailors, being rescued from drowning by a skipper during a violent storm. In gratitude, the saint promised the shipmaster to display a warning light whenever a storm threatened. Thereafter Italian crewmen thought of the eerie, glowing flicker as visible assurance of the saint's protectiveness.

Italians called the fire "Sant Ermo." Gradually this evolved into Saint Elmo.

Many myths and superstitions about the Fire were developed down through the years. Some old salts still believe that if St. Elmo's Fire appears in the rigging of a ship, rising in weird dance, the weather will improve. However, if the fire falls, get your best sea-legs under you.

Bowditch's, that storehouse of nautical knowledge, explains St. Elmo's Fire this way: "An exposed surface may acquire a considerable charge of static electricity. This may be caused by friction of water or solid particles blown against or along such a surface. It may also be caused by splitting of a water droplet, one half acquiring a positive charge and the other a negative charge. These charges may be transferred to the surface. The charge tends to gather at points and ridges of the conducting surface, and when it accumulates to a sufficient extent to overcome the insulating properties of the atmosphere, it discharges into the atmosphere. Under suitable conditions this becomes visible and is known as St. Elmo's Fire, which is sometimes seen at mastheads, the ends of yardarms, etc."

**IF I WERE SKIPPER**

If I were Skipper, I would like to say  
 "You did a good job yesterday."  
 I'd seek out the mate, or the cook, or a boy,  
 Whose heart would leap with a thrill of joy  
 At a word of praise, and I'd pass it out  
 Where the crew could hear as I walked about.  
 If I were in charge, I would like to find  
 The sailor whose work is the proper kind;  
 And whenever to me a good thing came,  
 I'd ask to be told the toiler's name,  
 And I'd go to him and I'd pat his back  
 And I'd say "That was perfectly splendid, Jack."  
 Now a bit of praise isn't much to give,  
 But it's dear to the heart of all who live;  
 And there's never a man on this good old earth  
 But is glad to be told that he's been of worth;  
 And a kindly word when the work is fair  
 Is welcomed and wanted everywhere.  
 If I were "Skipper," I am sure I should  
 Say a kind word wherever I could,  
 For the sailor who gives his best by day  
 Wants a little more than his monthly pay;  
 He likes to know with the setting sun  
 That the Old Man's pleased with a job well done.

—Anonymous



**"Call me Sparks"**

(Continued from Page 11)

**"Like a Painted Ship upon a Painted Ocean"**

Beautiful sunsets are frequently a delightful treat for sailors and passengers as we cruise in or near the tropics where the moisture laden air seems to aid refraction and accentuate the crimson and gold colors that paint the sky as day slips into night. While radio operators have as great an appreciation for aesthetic beauty as others, the receipt of a dozen or so messages each evening from millionaire passengers aboard, averaging about three hundred words each, who wanted to paint a word picture to relatives or friends back home, diluted some of the brilliance of appreciation as it was quite a struggle to "clear the hook" due to static and distance with equipment at hand. I am thinking of an experience on a cruise trip of the SS City of Los Angeles (LASSCO LINE) I took circumnavigating South America in 1927, sponsored by the Honolulu and San Francisco Rotary Clubs and reportedly with nearly two dozen millionaires aboard and many other affluent vips.

Another day - another ocean ! This time on the cargo ship, S.S. West Henshaw of the Moore-McCormick Line bound from San Pedro for Auckland, New Zealand near Christmas Island. I have never watched such sheer spectacular dazzling color and such sublime beauty as I did one sunset on this trip. The sea was glassy, with a small shimmer of motion but not enough to ripple or break water. Thunderheads picked up the sinking sun's beautiful rays and reflected such a kaleidoscope of color and mirrored reflections by each wavelet and it was of such exquisite beauty that I feel totally inadequate to describe it. Sufficient to say, dinner was delayed for nearly an hour while we all stood on deck and drank in God's drama of the skies. I am sure it was the perfect prelude to the splendor of Saint Peter's pearly gate as we cross the final bar enroute to snug harbor.

**"Strange Sounding Names"**



JAIN  
TEMPLE  
  
CALCUTTA  
INDIA  
  
WAB - 1919

**Strange Sounding Places"**

What causes us to remember certain names? A strange sounding name often registers itself in our memory because it seems mysterious and holds a peculiar fascination that cannot be satisfied short of visiting the place.

Rudyard Kipling, the top salesman for the British Empire was also perhaps the word artist that filled my vivid imagination with the pictures of India, Asia and the Orient and the man although he didn't know it, was indirectly responsible for my burning desire to someday see the places he had described in song and verse. For example: Mandalay!

"On the road to Mandalay  
Where the flyin' fishes play  
An' the dawn comes up like thunder  
Outer China 'crost the Bay !

While I didn't reach Mandalay, I did sail his China Sea and I reached the Bay of Bengal and saw the wealth of the Indus.



TRANQUILITY - on the Bay of Bengal



TAJ MAHAL - Agara India Mausoleum built 1932-54 ( 20 years and 20,000 workmen to build) - Indian Govt. Photo.

During tie-up at Calcutta I visited Darjeeling near Sikkim which is as near the "top of the world" as one can reach. The burning ghats on the bank of the Hooghly River at Calcutta, I would like to forget ! I saw Jain Temple, the greatest banyon tree on earth and on to Ceylon where I watched working-elephants, saw the dancers near Kandy, as well as visited the tea plantations. I also learned more of the intriguing "Monsoons" at first hand !

**Continuing Epic ,  
Staged by Aeolies and Jupiter Pluvius**

While the "Monsoon" cannot be billed as a "spectacular" like the typhoon or the Hurricanes of the West Indies or Indian Ocean, it is, never-the-less one of nature's greatest shows, personally witnessed every year by more of the earth's population than any other phenomena of the universe. The rhythmic change of setting occurs with a marked degree of regularity every six months which is why the Arabs of ancient times called the classic - "Mausim", the name for seasons.

This great show is actually directed by Aeolus, the Greek playwright who dramatizes all weather with his repertoire of winds. He "stars" the "northeast monsoons" from October through February when clear dry and enjoyable conditions exist over most of India and Southeast Asia. Then for a couple of months, through April and May the tempo builds up with increasing heat, dust, sandstorms and haze until with a great burst, the land is covered with a massive deck of dark clouds and Jupiter Pluvius is given the signal to "pull the stopper" which releases the rains that inundate the land from the "Southwest Monsoons".

The Indian Ocean actually acts as a gigantic evaporator which super-charges the air above it with moisture, until it becomes saturated, then drawn by the low pressure area, spills its contents on Southeast Asia from the middle of April until late September. During this time there is an abrupt transformation in the face of the land as it suddenly becomes verdant and green with luxurious plant growth to feed the dense population - especially rice, its basic crop. Even the great military might of the United States has learned to respect the Southwest monsoons as they can pin down an entire army and stop it dead in its tracks.

**"Monsoon Season"**

When we talk about "monsoons" without definitive direction, we always refer to the "Southwest Monsoons" with their life-saving rains. While there is some annual variation, they seem to strike with consistent regularity, hitting Bombay about April 5th, Bengal ten days later and usually arrive in Punjab May 1st. The Ghat range of hills along the Malabar Coast is the first yearly scene of the yearly reoccurring drama. The moisture laden winds are piled up and deflected upward to the cooling atmosphere which condenses them into torrential rains, sufficient to support jungal growth even if there is scant rainfall the balance of the year. After deluging the coastal hill area, the clouds continue eastward across the Dekkan Hills of Central India which they also drench. The greatest drama occurs however, near the Khasi Hills of north-east India in the Province of Assam. This has been referred to as the "death-trap" of the monsoons. The monsoons traveling up the Brahmaputra Valley between the Patkoi Mountains to the South and Himalayas become encircled and rise in a vortex too small for them. As they converge, they are forced upward and as they do so jettison their moisture thus causing the Vale of Assam to become one of the wettest spots on earth.

(Continued on Page 13)





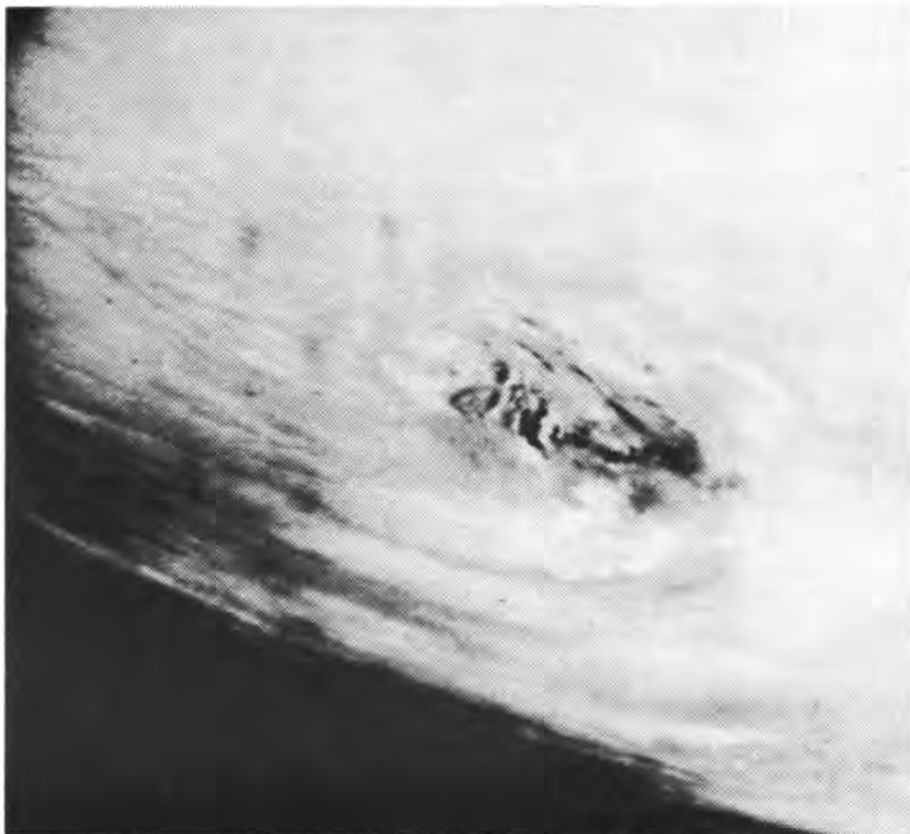
Picture of Waterspout taken as ship passed through Straits of Malacca in 1919 by ship's photographer - S.S. Santa Cruze

The Monsoons, according to eminent meteorologists and scientists cause such great seasonal changes that it effects the climate of the rest of our globe and in fact, is second only to the entire global system of winds and seasons. The weather extremes which cause the seasonal migration of planetary winds are due to conditions and terrain which exist only in this area of the world. The basic changes are caused by shifting conditions in the high altitude circulation of jet streams. More than half of the tropical storms of the world are spawned in this area which carries the distinction also of producing the greatest variations in temperature and the highest recorded precipitation, such as in the Khasi Hills where 41 inches of rain fell in one day or where the annual fall ranges between 425 and 500 inches. Following the "retreat" or "capsizing" of the South west summer monsoon, comes the Typhoon or Hurricane seasons which last from the later part of September until early December.

### El Mar Pacifico

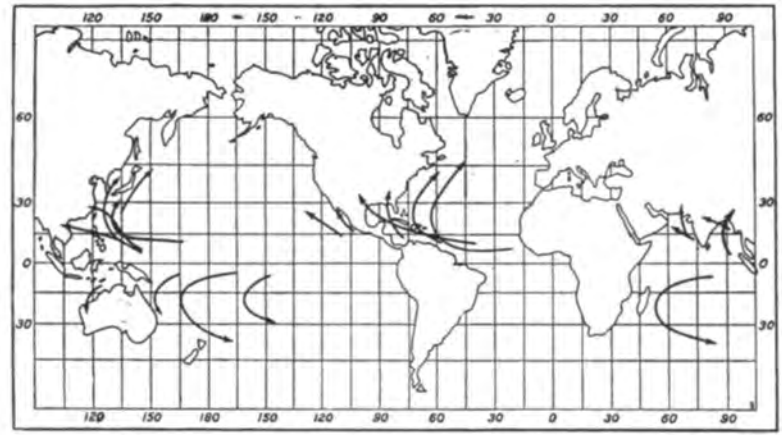
"When she was good - she was very very good,  
But when she was bad, she was horrid!  
- Mother Goose -

When Ferdinand Magellan, alias Fernando de Magallanes, picked his way through the straits that now bear his name, on his flagship Victoria, in 1519, he sailed out upon waters so tranquil that he could not refrain from calling it "Pacifico" because it was so tranquil. Had he sailed the North Pacific or had his voyage taken him into the "roaring forties" of the South Pacific, this great expanse of ocean might well bear another name, indeed.



Hurricane Debbie photographed from the Mercury spacecraft traveling at 17,500 m.p.h. over one hundred miles above the earth. *National Aeronautics and Space Administration*

## World Hurricanes & Tropical Cyclones



The principal hurricane regions of the world and their average paths of motion.

### OCCURRENCE OF TROPICAL CYCLONES

	January	February	March	April	May	June	July	August	September	October	November	December	Annual average number	Length of record, years
1. North Atlantic Ocean.....	0	0	0	0	4	24	25	71	112	91	23	2	7	50
2. Southeastern North Pacific Ocean.....	0	0	0	0	3	17	17	25	50	26	2	1	5	27
3. North Pacific Ocean (Far East).....	15	8	11	13	26	36	109	151	129	117	59	37	20	36
4. Arabian Sea.....	*	*	*	*	5	11	3	0	2	10	8	2	2	23
Bay of Bengal.....	*	*	*	*	21	42	65	55	70	51	37	17	10	36
5. South Indian Ocean.....	113	115	98	68	25	3	*	*	*	7	33	58	7	70
6. Australian waters to 160°E. longitude..	54	49	58	29	7	7	*	*	*	4	10	22	3	84
South Pacific Ocean east of 160°E. longitude.....	69	47	64	18	2	2	*	*	*	4	8	31	2	105

U.S. Government Publication, Hydrographic Office, No. 9.

While the typhoons of Asia, Hurricanes of the West Indies and Cyclones of the Indian Oceans are more violent in nature than the gales and storms of the Pacific Reaches, they are more localized in nature and duration is relatively short. While some real howling gales have lashed the Western Ocean (North Atlantic) and in fact one storm so severe, that it piled its waves on the dykes of Holland - broke through and inundated a half million acres of prime land, while at the same time drowning 1400 people. This happened on February 1, 1953 and a real nightmare the Dutch will long remember.

### "Ferocious World"

The most ferocious gale and storm conditions in the world are to be found in the higher latitudes of the land "down under" where there are no land masses to break the force of the wind and consequently, gale winds which sweep this area most of the year, pile wave on wave in one continuous increasing undulations of titanic spouting fury. It takes from six to nine hundred miles of "fetch" (the word used by hydrographers to describe the distance it requires for winds to blow across open water to generate waves of greatest height). Factors which bear on wave height, also include the force of wind and in the "roaring-forties" there are constant gales that build the waves to gigantic sizes which mariners have learned to call "graybeards". Fortunately, however, for world shipping, there are few sea-lanes in the "roaring-forties". However, waves generated in these latitudes have been recorded at distances of over six thousand miles - so great has been their size and force.

(Continued on Page 14)



Official U. S. Coast Guard photo  
Rough seas loom above the stern of a Coast Guard cutter. Waves are created by pressure changes on the sea's surface which rotate water particles.

(Continued from Page 13)

## "Call me Sparks"

### Stock in Trade



The "stock in trade" of wireless operators consists mostly of storms, fog, ice, poor visibility and fire. These are the primary elements that wireless usage have helped to overcome or circumvent, which have increased safety of life at sea to a remarkable degree. There are many other factors which make wireless indispensable, most of them being the commercial utility such installations provide. Operating companies find it necessary to handle "ships business" by wireless on frequent occasions and such direct communications enables them to operate with increased efficiency. Passengers and crew also enjoy the wireless installation in much the same manner as having a telephone at hand in your home for contacting relatives and friends.

Wireless has frequently been used to help in saving the lives of many stricken at sea by illness or accidents. During one of my trips on the cargo ship S. S. West Henshaw, bound from San Pedro for New Zealand, one of our ship's "black-gang" became violently ill. Those aboard were not sure of the ailment, so we wirelessed symptoms to the shore station at Rarotonga and one of their local doctors informed us it was acute appendicitis (which we suspected). He furnished full step-by-step operating instructions by wireless. The Captain aided by a mate and the Chief Steward, performed the operation. We altered our course and put the patient ashore in Rarotonga in the Cook Islands and subsequently, learned that he fully recovered. Many times a big liner, with a doctor aboard, has altered her course to take aboard ill seamen transferred from a passing cargo ship or oil tanker and many lives have been saved in this manner. Thanks to Wireless.

While gales and storms on the great open reaches of the North Pacific, do not quite measure up to those of the "roaring-forties" of the Southern Hemisphere, they are frequently vicious and the great bell at Lloyds has tolled often for ships on the "great-circle" that never reached port. The effect of storms in this immense void have been probably felt more than anywhere else on earth, due to the volume of bottoms that have sailed this sea-lane, plus the violence thrown at the sailor and his ship on this route.

I have made this crossing three times and each trip I have been aboard ships continuously harrassed by gale force winds, dense fog and high seas. The Japanese Current known as "Kuroshio" or black current, on account of its deep indigo blue color, meets the frigid Oyoshio Current from the Sea of Okhotsk off the Kuril Islands and a little further eastward, the waters from the cold Bering Sea. By the time the warm Japanese Current meets the waters from the cold Bering currents, the North Pacific is thoroughly chilled. Meanwhile the meeting of the one warm and two extremely cold waters produce heavy fog conditions which nearly equal those of the Grand Banks.

Added to the above condition is the available great open distances known as "fetch" that allow the gale force winds, especially during the winter, to build up a howling wilderness of crashing seas and in the perpetual murk of heavy fog, smaller ships will heave and toss like a cork for days on end, and indeed the great liners such as the Great Northern, Northern Pacific and Empress Ships did their pitching and wallowing in days gone by.

### "40 - Days of Hell"

It took us nearly forty days to make the North Pacific crossing on one homeward bound voyage I made on the oil tanker S.S. Miskinaza from Singapore to San Francisco. The distance between these ports was over seven thousand miles. Normally our speed of eight knots, was given some assist by the Japanese Current, with its easterly set, but riding high with considerable freeboard and in ballast, we received the brunt of fierce winds and we were buffeted so much that the blades of the propeller were out of water much of the time, and we had to reduce revolutions to the point we could hardly make headway on some days.

This particular voyage occurred during the month of February which along with January and early March, is perhaps the stormiest season on the North Pacific. We experienced nearly three weeks of howling winds and towering seas that constantly swept across the decks. Giant waves would pick our tanker up, lift it high in the air, then fall out from under and often as we dropped, the bow and stern would be caught by waves, but with no support amidship, the entire hull would vibrate until the oscillations would end with a supporting wave, then the performance would repeat until we wondered if she could take it, or would we break in two and add one more toll to Lloyd's bell?

While we were severely buffeted for nearly three weeks, we experienced three days that Father Neptune really pulled the "cork"! It seemed like the mountainous waves with their white crests would swamp us at any time. One after another these gigantic combers would show their teeth, pound and hit us with shattering impact, then spindrift blown by gale force winds or better, would sweep the crests and blind us and with salt brimmed eyes, we would watch for the ominous spouting fury of the next one. It was enough to make a brave sailor flinch as each wave seemed determined to exterminate us. Davy Jones was waiting, but it was not his day!



Riding the storm as we did for several days, one gains a lot of confidence and respect for his ship which becomes a vibrant living entity and we feel brazen enough to go out and challenge nature to throw even a bigger one at us. One experiences a feeling of exhilaration when you know you have won the battle against these savage elements and it is a culmination of such experiences one goes through that tie us with a firm bond and generate a love for salt water that remain with us until we cross the bar. It is somewhat of a paradox that one can experience love and hate at the same time, but while we may cuss the sea and our ship at times, we also retain a feeling of reverence and respect for God's elements which have the power to help or destroy. I know that when I sail, I could never be content riding across "mill-pond" waters, as you need the "feel" of the sea — through its never ending motion and relentless surging undulations.

Attesting to the ferocity of the North Pacific's gales and waves, the mate of the U.S.S. RAMAPO, caught in such a storm, February 6, 1933 enroute Manila to San Diego, checked winds blowing at storm strength, according to Beaufort Scale, and waves measured at 112 feet high, with another, estimated even higher. It is believed that this is the highest wave that has ever been reliably measured and recorded. Waves 80 feet high were reported by the S.S. MAJESTIC on the Atlantic during a gale, December 29, 1922, and the mate on the S.S. OLYMPIC measured waves 75 feet high, February 27, 1925 during a crossing of the Western Ocean.

There is a reason for everything I guess on the universe, including these violent storms and waves which tend to keep the waters of the world stirred up, otherwise they would stagnate and in so doing would cause complex problems that would plague mankind. The winds and currents have a prime impact on the weather of continents and life itself including that which also exists in the seas of the world and upon which the "exploding" population will have to turn for food in centuries to come if it hopes to continue existence.

One who has sailed the seven-seas can sense the infinite feeling of bitter loneliness that officers and crews must have gone through in the days before wireless. Take my voyage on the S.S. Miskinaza — caught in the shrieking and churning waters of the North Pacific, where the whole ocean seemed to be on a gigantic rampage and with cruel biting blasts of wintery winds unleashed at hurricane to gale force, one feels like a small pawn indeed, in the great life and death struggle you are locked in, out in this lonely void of grayness — thousands of miles from a friendly landfall and indeed, hundreds of miles from the foreboding islands of the Aleutian chain or the nearest ship.

During the worst of the storm, I wedged myself to my post in the wireless "shack". While it was hard to disregard the pitching and rolling of the ship in its wild gyrations, the moment you put your ear-phones on and "tuned in" — you were suddenly miraculously transformed into a different world. Far to the south you could hear the shore station at Wahiawa (Call "KHK") in sunny Hawaii. Weather reports indicated the usual balmy weather and we could only think of the salubrious days we had spent on the beach at Waikiki and Hilo. Northward, we could hear the Naval

(Continued on Page 15)



"IT COULD HAVE BEEN A DAMNED SIGHT WORSE. EH, WIRELESS OPERATOR — ONE PASSENGER TO SEND A MESSAGE FROM NOW ON."

Station on Saint Paul's Island out in the Bering Sea (Call "NPQ") collecting position reports from ships on the northern circle. We called these messages, "TR" reports. They gave the latitude and longitude of each ship reporting and were relayed stateside for publication in Coast newspapers.

We could visualize that the boys on Saint Paul Island, which is part of the Pribilof Group and the summer home of the fur seal, were indeed isolated far out in the Bering Sea surrounded by barriers of snow and ice and we could hardly refrain from soliloquizing that at least they were snug in their secure land-based home and were not wallowing around in the discomfort of of stormy seas bouncing around the firmament with Davy Jones clutching at our ship with his watery fingers. I could hear many ships but none of them very close. Occasionally, I would exchange weather reports with those on our route.

### "Homeward Bound"

Most of the ships in the early "twenties" were using quenched spark gap transmitters which were considered a great improvement over the open gap or the synchronous gap transmitters of the previous decade. We worked mostly on a frequency of six hundred meters which was set aside for ship communication. Since all ships worked on the same frequency, it was like listening in to a "party-line" on a rural telephone system. You could hear everyone in range and they could hear you so unless you had official business to send, you would "jam" some other station that was trying to "unload" his traffic so that old timers never touched their key unless they had justification.

Several times daily, I would tune-in the high powered navy stations of "NPG" San Francisco, "NPM" at Pearl Harbor, Hawaii and "NPN" at Guam, who relayed press across the Pacific on their high-power "arc" transmitters. We called "NPM" at Pearl Harbor, "old reliable" as you could copy his 500 K.W. transmitter on wavelength of 11,200 meters nearly anyplace in the Pacific, except far west of Guam. While the press was intended for units of the Pacific fleet in Asiatic waters, all marine stations also copied this press to keep up with the news of the world. There was no requirement in those days that such news be furnished the ship's crew, however, most operators usually copied press (which we called "PX") and posted several pages of condensed news on the bulletin board daily for the officers and crew who were most appreciative.

The S.S. MISKIANZI's log did not record much forward progress day by day, but we would edge eastward a hundred miles or so every 24-hour day and the stations and neighboring ships en route would change. We would soon be out of range of the Japanese stations at Chosie ("JCS") near Yokohama, "JJC" at Funabashi and "JOC" Otchishi out on the Kurils which seemed to come in best on the northern routes, also the Russian station "PRK" at Petropavlovski, the seaport town near the end of the Kamchatka Peninsula, which was powerful, but since they didn't send weather, time, or press, we did not pay much attention to him. The Saint Paul station of "NPQ" carried well to the south and southeast and we worked them quite a distance, then we started to pick up "VAE" on Vancouver Island and as we progressed slowly eastward, the American stations of "NPE" North-Head, "NPW" at Eureka and finally "NPC" at San Francisco would become increasingly audible — making us feel like we were close to home!



Chapter Two is a confession. Reading time about 5 minutes. It concludes my [dream] book planned some twenty plus years ago. There is a saying ... "To make a journey one has to take the first step." This was to be my first step into a project to keep me active after retirement in 1958 from aeronautical radio in the CAA after more than a quarter century of wonderful experience in a field that literally knew no boundaries — and still growing.

The foregoing Chapter One is evidence of my resolve; however, my plans to write a book (like many of my colleagues and peers) were preempted by the founding of the Society of Wireless Pioneers which I was to learn would take all of my available time. Actually I had worked up an outline of about twelve chapters covering a researched history of the very early days of wireless down to and including my years at sea as a "Wireless Operator" plus additional years of shore-side activities connected with marine-radio. Sandwiched in between were added experiences in retailing, manufacturing and the wholesaling of radio parts, sets and supplies, both marine and broadcast equipment.

Additionally, I started the Los Angeles Radio Institute and ran it for a number of years. After retirement, I founded Key Travel Service in Santa Barbara, California — booking people all over the world. ( Still in business and going well although I sold my interest many years ago). I have published books, one of which I authored in 1920 (Trans-Pacific Radio Operator's Guide); Was West-Coast dis-



### SKIPPER CAUGHT IN A 'PENSIVE' MOOD

"Ye Ancient Mariner" — Bill Breniman, that is... snapped by ship's photographer aboard the SS MARIPOSA in Sydney, waiting to snap a pix of THE BRIDGE as the ship swung out of the harbor. He was thinking of the many enjoyable calls to Australian and New Zealand ports he had made 50 years before on "KQED".

tributor for Hugo Gernsback books circa 1923-4 and U.S. distributor for "Holiday on Ships" published in England. I was also Vice President of the "Freighter Travel Club of America". I have worn an Editor's cap since 1920 and included several government — aviation publications. When my friend Ray Meyers (89-S-SGP) was Chairman of the Southern Calif. Interference Committee (formed by my friend Bernard Linden, Chief FCC, SoCal.) I was on his committee for several years as representative of aeronautical radio.

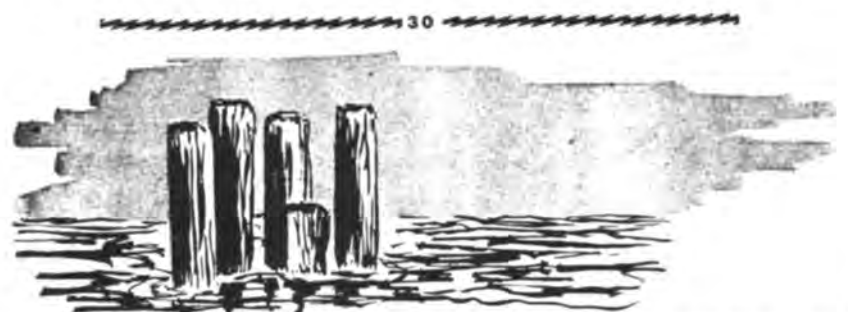
I could name a dozen or so other activities but you would think I am bragging? [perhaps I am.] Also how did I have time do so many things? Sometimes I wonder myself! Anyway, after publishing many stories for our members, many who were shipmates and friendly contemporaries in Sparks Journal, I decided to take advantage of my 'Editorial License' to print the unfinished story of the Ancient Mariner. You may find it a bit different as I have failed to this point in mentioning the 'Quaker Oats' cartons or the 'Ford Spark Coils,' which seemed quite important in this octogenarian's early boyhood.

As a confirmed 'history-buff' I have always enjoyed reading about and recording the history of the early days of wireless... or even before wireless, back to Thales of Miletus who observed the phenomena of magnetism and frictional electricity about 680 BC in Greece.

It seems that each decade brings a new coterie of scientists, inventors or discoverers who build on the past and knowledge of their predecessors and contemporaries. Even Edison is reported to have remarked ... "I begin where the other fellow left off."

We now think that the state of the art is so highly sophisticated that there is little room for development? Wrong Gridley! We now have so many facets of knowledge in our memory bank that there are literally thousands of starting points for those with ideas to explore. In other words ... "You ain't seen nothin' yet!"

We do live in a marvelous age. Of course the electronic field has not monopolized the whole periphery of modern age thinking and interest but it is sobering to know that if you pushed the 'Panic Button' it would turn off all the electricity over the world. Mankind has come a long way since Thales 'stroked the amber'!



# Reflections of a Pioneer

BY JAMES J. McARDLE

April 1928. A picture of Mackay Telegraph Company antenna farm located on top of Daly City hill just south of San Francisco. Note the large loops and sensing antennas. The loops were tuned to the low frequencies around 100 KC. They were used for receiving point to point communication. Los Angeles on the south and Portland and Seattle on the north. The arc transmitters for the San Francisco section were located in Palo Alto. The receiving and sending was done from an operating room in the Hobart Building, San Francisco. One of the loop antennas was for KFS use, it was tuned to 2400 meters (138 KC) for communicating with the ships equipped with arc transmitters. The sensing antenna is coupled to the loop and by adjusting the components in the receiver a very effective front to back ratio could be obtained. This was of course very helpful to us because most of the traffic came from the westerly direction, ships plying between San Francisco the Orient and Australia. The back of the loop was to the easterly direction where the QRN originated and usually was very strong. The loops were rotated from inside the shack by hand. The picture shows me sitting at the operating table beside the hand crank. The new addition on the end of the shack is KFS operating room. This room was added on when KFS moved from the beach location.

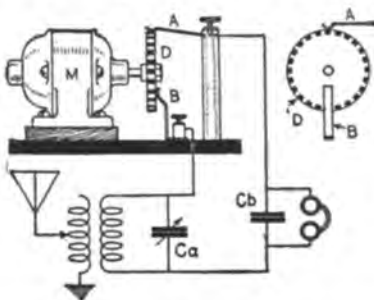
The chief operator would occasionally visit the operators of passenger ships in order to drum up some business. One day he asked me to come in early because he wanted to visit a Japanese passenger ship docked in San Francisco. At that time the Japanese passenger ships carried brides, who were to be married upon arrival. Each one had to send a message advising of her arrival. This amounted to a sizeable number of radiograms and he was anxious to get the business. He took the four operators on a tour of the city which ended up at KFS operating room. The chief who had a tendency to stutter, gave quite a dissertation in pigeon english about the new receiver that KFS had just acquired. He told them how wonderfully it performed and it was especially adapted to the ships sailing to the Orient. After he got finished there was a long pause. The tortoise shell bespectacled junior operator just could not restrain himself any longer, so he asked, "Have got blue print?"



W T C

August, 1919 S.S. Lansing - docked at Akutan, Alaska. Whaling-station. You haven't smelled anything until you get a whiff of a whaling dissecting plant. I would rate it higher than QSA 5. It was noticeable when we entered the harbour. The wireless operator sure was glad to see us. He invited me on a Cook's tour of the whaling plant, but I couldn't take it. However, it was an exciting little village and we enjoyed the visit. The wireless operator had two fox skins which he purchased from a trapper and he offered them to me for \$15.00 each. I sold one to the first mate and shipped the other one to my mother, boxed by the ship's carpenter. They processed beautifully.

P.S. The Lansing was equipped with a Poulsen Arc.



A simple Poulsen ticker. This is used to interrupt circuits of a receiving tuner at a uniform rate per second.

K F S



DALY CITY



## Hi Jinx on the Hi C's (LEFT)

Look what happened to me in 1925 when I paid a goodwill call to the S/S President Lincoln - KDUY. After a few whiffs of the cork of the Johnny Walker bottle, which was something to brag about in those days of prohibition, the gang decided to doll me up for a picture. The kimona belongs to Ray Foley, which was bought in KOBE for his girl friend, the cork helmet is Don Cameron's, he got it in Shanghai, the swagger stick belongs to Jerry Sellers, think he found it in Hong Kong. Ray Foley and Jerry Sellers - silent keys.

(RIGHT) Picture taken in 1919 of "Jim" McArdle (left) and Findley on SS Yale by 'Ye Ed'. Jim came aboard the Tanker Miskienza-KOZM in Manila for a visit early in 1919. Findley reported to have become a Silent Key long ago.

## Good Humor Dept.

A true story.

1919 - Wireless operator aboard the S.S. Frank H. Buck, enroute Seattle to the Bay Area.

Breakfast at the Captain's Table.

Captain grumbling, "Received a letter from my wife with this bit of gossip with a neighbor over the back fence."

Neighbor, "What does your husband do aboard the ship?"

Captain's wife, "I told her you were the captain.", and she became very concerned and said, "what a coincidence, I received a letter from my son in the navy and he mentioned that he was promoted to the Captain of the Heads. I wonder if by any chance your husband would know him?"

Captain. "Damn these wimmen."

P.S. The Frank H. Buck was equipped with a Poulsen Arc.

## Tragedy at the Beach

A real night mareish incident occurred at old KFS one morning on the graveyard shift. It was around 4:00 AM. I was all engrossed in and straining hard to clean up the traffic from the Australian and Oriental bound ships, when I heard the door open I turned quickly to see who it was, and to my surprise there was an elderly man standing besides me. He was well dressed in a black suit, tie, hat and white shirt. Before I could clear the QRN out of my head, he said, "I want to rent a room". I told him to get out that this wasn't a hotel. He left without an argument. After clearing up the traffic and collecting my wits, I realized that he must have been injured. Blood on the floor proved this, so I went looking, but couldn't find him. The mounted patrolman on the beat, an old boyhood buddy of mine dropped by to say hello. He took up the blood trail, but couldn't find him. It turned out, that this poor old guy was the night watchman at Playland at the Beach, became despondent when his wife passed away, attempted suicide by shooting himself in the head. He was found dead later that morning.







# SOS

**HISTORICAL PAPER**

## TO THE RESCUE

REPRINTED FROM HISTORICAL COLLECTION OF

**Cmdr. Karl H.W. Baarslag USNR RET.**

### CHAPTER ONE

UNTIL the dawn of this century ships great and small sailed for distant ports and, once they had passed over the horizon, were lost to the world until weeks or months later when they were again sighted by shore. Except for a chance meeting with some homeward-bound vessel, a ship might as well have sailed for a million miles into space. Once out of sight of land those who went down to the sea in ships belonged to another world—a world of stark loneliness and utter silence.

Ships burned or foundered in storms with not so much as a whisper reaching land to tell of their fate. Land communication had advanced to telegraphy and telephony over considerable distances, and continents were linked together by marine cables, but a ship at sea was still limited to visual and auditive signalling such as rockets, flags, lights, whistles and detonating devices, all of which were necessarily limited in effectiveness to a few miles. The crew of a sinking or burning ship fought their battle for life, silently and alone, unable to inform the world of their plight or to summon assistance, which might be just over the horizon. They were as isolated and self-dependent as any Norse rover in the Northern seas, or a Magellan or Cook in the vast Pacific. Defeated and overwhelmed, they were driven to take to their small boats, their last hope, to become the sport of wind and wave until a chance rescuer happened along days, weeks or even months later; or as was frequently the case, they sickened, went mad and died under the torment of exposure, hunger, and thirst. The hardships and sufferings endured on small boat voyages fill many harrowing pages in the stirring annals of the sea.

Wireless telegraphy with its magic powers was to wrest from the sea its ancient terror of silence and to give speech to ships which had been mute since the dawn of navigation. Free as its medium, the all-pervading ether, it laughed at distance, night, fog or obstruction. It sped on the wings of lightning, and a bolt of Jove became its appropriate symbol.

While Guglielmo Marconi is generally credited with being the "Father of Radio," it should not be forgotten that wireless telegraphy was the cumulative result of the labours of many men in several countries and not the unaided invention of any one individual. Marconi has frequently acknowledged his indebtedness to his boyhood instructor, Professor Righi of Bologna and to Heinrich Hertz, the German discoverer of the electro-magnetic waves bearing his name which are utilized in wireless communication.

In 1865, James Clerk Maxwell, the brilliant Scots physicist, developed and propounded his theory of electromagnetic pulsations or waves, the foundations for his research having been laid by the great Faraday. Hertz demonstrated their existence, while Crookes was the first to foresee and suggest the possibility of utilizing this new phenomenon in telegraphic communication. A number of scientists began their investigations and experiments, among them, Ruhmkorff, Popoff, Preece, Branley, Lodge, Slaby, Braun, D. E. Hughes and Tesla. Nor must we forget the Americans who contributed so much to the art: Edison, Fessenden, Dolbear, Logwood and DeForest.

Marconi applied for his first British patent for wireless telegraphy in 1896. From the very first he began conducting his experiments over water. Telegraphy without wires was naturally destined for the sea, it



Karl Baarslag

### Editorial Comment

Karl was one of the Society's early Historians and also a Director for years. He has furnished us with a wealth of information and stories which we published. His book "SOS TO THE RESCUE" - 1935 has been read by many members. Since it has been out of print for over 50 years, we think many of our new members might like to read it and since he long ago gave us that authority, we will try to bring a chapter or so in each of our Journals.

Member Don Thomas, a close friend of Karl for many years has furnished a story and some pictures of Karl which we think you will find very interesting. You will find them at the end of Chapter One. Karl was a very dedicated man. He did a lot for the Society and we are eternally grateful. MHRIP. W.A.B.

would annihilate the age-old silence of the deep. While others toiled in laboratories, he was quick to foresee the commercial possibilities of the newly discovered phenomenon, and the British Marconi Company was organized in 1900, to be followed two years later by an American subsidiary.

Wireless was at first a puny infant, weak and unpromising, but it grew quickly. At the age of one year its toddling steps were extended to ten miles across water; beyond the range of flag signals. By the time it was four, it had lengthened its stride to that of a mythological giant, 200 miles; it was ready to go to work. In fact, it had already begun its useful and humanitarian labours. In December 1898, East Goodwin Lightship, marking the dangerous Goodwin Sands off the southeastern coast of England, was equipped with apparatus. The installation, which was extremely simple, was taken



out in an open boat and put into service in the course of an afternoon.

This first lightship set operated successfully on its initial service trial. On March 3rd, 1899, the lightship was rammed, at 4 o'clock in the morning, by the SS. *R. F. Matthews*. The first distress call ever sent from a ship at sea was flashed ashore to South Foreland. Tugs were sent and the lightship was towed out of danger.

The German SS. *Kaiser Wilhelm der Grosse*, in March 1900, appears to have been the first ship in regular commercial service to have been equipped with radio apparatus. Previously, some warships, yachts, and other craft had carried sets, but only for experimental purposes. The Belgian Royal Mail Steampacket, *Princess Clementine*, in the Ostend-Dover service, was fitted the same year, and on January 1st, 1901, it was put to good use summoning assistance for the Bark *Medora*, aground on Ratel Bank. Nineteen days later, the *Princess Clementine* herself was in trouble, ashore in a thick fog at Mariakerke, and her radio was again used for more important messages than routine traffic. There was both hope and promise in this infant science, with the stride of a giant and the speed of thought, which could summon help from far over the horizon in the space of a second.

By 1904 a number of ships in the trans-Atlantic trade were equipped with wireless telegraphy. The British operators were nearly all landline telegraphers who had left railroad or postoffice keys to go to sea in the newly opened field. They brought along with them not only their Morse code but also many of their telegraphic abbreviations and signals. One was the general call—CQ, which had been used to attract attention of all operators along a wire. It preceded the time signal in the morning at 10 o'clock and also all notices of general importance. CQ went to sea and became a general call to all ships.

A preliminary International Conference for the regulation of wireless telegraphy was held in Berlin in 1903, but it confined its deliberations mainly to informal discussions and the preparation of an agenda for the 1906 International Convention to be held in the same city. The Italian delegation brought up the question of distress signals and the desirability of granting such signals priority over all other communications. They suggested the letters SSSDDD to be used as an internationally recognized distress call. Every ship receiving this call was to suspend all other communications at once and devote itself entirely to communication with the ship in distress. Although there was no disagreement in principle, it was finally decided to leave the entire matter to the next Conference for final disposition. The Conference did, however, insert in its final protocol that: "Wireless telegraph stations must, unless there is a material impossibility, give priority to calls for help which come to them from ships."

Early in 1904 the Marconi Company, realizing the desirability of some universal distress signal, filled the need by issuing the following general order:

"It has been brought to our notice that the call 'CQ' (All stations) while being satisfactory for general purposes, does not sufficiently express the urgency required in a signal of distress.

"Therefore, on and after the 1st of February, 1904, the call to be given by ships in distress, or in any way requiring assistance, shall be 'CQD.'

"This signal must on no account be used except by order of the Captain of the ship in distress or by other vessels or stations re-transmitting the signal on account of the ship in distress. All stations must recognize the urgency of this call and make every effort to establish satisfactory communication with the least possible delay.

"Any mis-use of the call will result in the instant dismissal of the person improperly employing it."

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## SOS TO THE RESCUE

(Continued from Page 17)

CQD was popularly interpreted to mean "Come Quick Danger," but from the above order it can be seen that the letters in themselves had no such definite significance, being an old telegraphic general call—CQ—to which had been appended the letter D for distress.

The second International Radio Telegraphic Convention was held in Berlin in 1906, in response to an invitation by Kaiser Wilhelm II, who foresaw that the development of radio communication should be protected by international agreement against monopoly and private exploitation. Some thirty nations sent delegates; the United States delegation being headed by Admiral Manney and the American Ambassador Charlemagne Tower. The thorny question of inter-communication between competing systems and the selection of a suitable international distress call were the major problems to be settled at the Conference.

Impelled to action by the "Radio chaos in America," the American delegation was at first almost alone in its advocacy of compulsory inter-communication between all radio stations, irrespective of systems employed. The Marconi Company, dominant in its unassailable patent position and world-wide prestige, opposed this proposition on the grounds that it would be forced to place at the disposal of its rivals the far-flung network of its established facilities and equipment. Great Britain, Italy, Montenegro, and several other countries, already committed by agreements with the Marconi Company, officially opposed the American proposal of compulsory inter-communication. The American delegation persisted and succeeded in enlisting support from other powers so that the broad principle of compulsory inter-communication by international agreement was finally adopted by the Conference.

The selection of a suitable distress signal presented no great difficulties. German ships had been accustomed to using as a general inquiry call the signal "SOE," and the German delegation suggested this signal as an international distress call. This led to considerable discussion and the objection was advanced that the final "E" in "SOE," being only a dot in the Morse code, would be too easily lost in atmospheric disturbances, through interference, or if nervously transmitted. It was therefore judged preferable to substitute "SOS" for "SOE." Three dots, three dashes, three dots, could not be mistaken for anything else and was deemed to be the attention-arresting and distinctive signal desired to precede all international distress calls. It was to be sent as one unbroken signal, ...—... and is therefore SOS and not S.O.S. as it is so often seen misspelled. Orthography demanded an equivalent in letters, and so SOS was used, although the letters VTB, IJS, or SMB\* sent as one signal would form the same ...—... in the Morse code. Thus it can be seen that all such popular interpretations as "Save Our Souls," "Save Our Ship," or "Send Out Succour" have no foundation in fact but are merely the result of imagination and misconception.

The American delegation had suggested the letters "NC," which were already in use in the International Signal Code for visual signalling and which signified: "Call for help without delay, in distress." A short discussion, however, had resulted in its being withdrawn as unsuitable. It remains, nevertheless, to this day, the international distress hoist by signal flags.

SOS was officially adopted by international ratification in 1908, but the older CQD lingered on for several more years, especially in the British service where it had originated. Jack Binns was to make it famous in the *Republic-Florida* collision in 1909, and as late as 1912, Phillips on the foundering *Titanic* used both CQD and SOS. British operators, for sentimental reasons, regretted the abandonment of their CQD, which was a company and national signal, for the newer and "made in Germany" SOS. After the *Titanic* disaster, CQD was gradually forgotten, and SOS became supreme over the vast empire of the air. The United States, generally lagging in radio legislation, did not officially adopt SOS until 1912, four years after all other nations had ratified the 1906 Conference. It might not have acted even then had not the *Titanic*, and Phillips' dramatic use of SOS, directed world attention to the use of the signal as a call for help at sea.

The first distress call from an American vessel—that the writer has been able to trace—was sent out by Relief Ship No. 58 while on Nantucket Shoals Station, December 10th, 1905—a year before SOS was born. The relief ship had been on her station only five days when heavy gales set in which lasted for several days, reaching hurricane force at times. Buffeted unmercifully by tremendous seas on its exposed position, the ship sprang a leak which soon assumed alarming proportions. All pumps and hand-bailing facilities were employed to the limit in a desperate but losing battle to keep the water down. Finally, when it became apparent that the pumps could no longer cope with the inflow, a radio message was sent at 9 A.M. of December 10th to the Lighthouse authorities asking that aid be sent without delay.

The radio staff on board the lightship was composed of three naval electricians: Chief Electrician Burbank, 2nd Class Electrician C. J. Blankenship, and 2nd Class Electrician William E. Snyder. The latter, now Lieutenant Snyder, U.S.N., Retired, says that he broadcast the word "HELP" in both American Morse and the International code, since no distress call existed at that time. He added, "Nantucket Shoals Lightship in distress, send aid from anywhere." The Naval Radio Station at Newport, Rhode Island, seems to have been the only one to have heard the call, at least it was the only one to reply. By 3 P.M. the rising water had reached and extinguished the fires; the gale backed northwest and kicked up a murderous cross sea. The last sputtering radio received from the stricken lightship was, "Water gaining, we are helpless."

The Lighthouse Service Tender *Azalea* was dispatched from New Bedford and, in spite of the heavy gale and high seas, reached the wallowing lightship's side after a terrifying passage. Several hours were spent getting a line over the relief ship, and finally a towing hawser was successfully passed to her. Both small vessels were tossed around like canoes during the manœuvres incident to shooting a line to the sinking lightship. The *Azalea* began to tow the sinking vessel toward New Bedford. After five and one half hours of towing and struggling through mountainous seas, the captain of the lightship signalled that his vessel would have to be abandoned at once; she was sinking beneath their feet. A small boat was put over by the *Azalea*, and the crew of 13 on the lightship were taken aboard the rescuing tender without mishap. They had left none too soon—Lightship No. 58 sank from sight ten minutes after she had been abandoned. The *Azalea*, which was only a small vessel, made port several hours later, after what was described in the official report as a "fearful trip." Three years later, Nantucket Shoals was the scene of another epochal distress call and rescue, this time when Jack Binns sent out his famous CQD.

The first actual use of SOS on an American ship as distinguished from Snyder's "HELP" or Binns' CQD, was sent out by T. D. Haubner from the SS. *Arapahoe* on August 11th, 1909. Haubner, as an amateur in New Jersey, had listened raptly to all the stirring details surrounding the *Republic-Florida* crash and Binns' CQD in January 1909, little knowing, he says, that in less than six months he himself would be on the transmitting end of a distress call from a ship at sea. In June of that year he applied for a position with the United Wireless Company and was accepted. After a few trips on the SS. *San Marcus*, he was transferred to the SS. *Arapahoe*.

The *Arapahoe*, a single-screw freight and passenger steamer of some 3000 tons, was bound for Charleston and Jacksonville from New York when her shaft broke, 21 miles southeast of Cape Hatteras. Single screw and with a parted shaft, and being so near to the dreaded Diamond Shoals, known among mariners as the "Graveyard of the Atlantic," her position was critical. A strong northeast gale drove the helpless vessel toward the treacherous Carolina coast.

Captain Chichester immediately ordered the distress call to be sent. Haubner sent out the first SOS ever to be transmitted from an American vessel. Although the United States had not officially adopted SOS, the United Wireless had instructed its operators to use the new international call should the necessity arise. Haubner used both SOS and CQD, so that there could be no possibility of his call being lost through any operators' unfamiliarity with the newer signal. He was soon in communication

with "HA," the United Company's station at Hatteras. Two Revenue Cutters and several salvage-hungry tugs were soon racing to the rescue. The SS. *Iroquois* of the same line as the *Arapahoe* had just left New York, and she opened her drafts and raced down the New Jersey coast in response to her sister ship's appeal for help.

At 11 P.M. that night, radios from the *Arapahoe* indicated that she had succeeded in finding holding ground for her anchors, when 25 miles offshore and was no longer in immediate danger. The passengers, who at first had been alarmed, were quieted by the assurance that wireless had started several ships to their assistance. The SS. *Huron*, another of the same company's ships, came up from the southward and stood by during the night.

By noon of the following day, several other ships and tugs had reached the crippled liner. Offers of assistance were refused, the passengers remained on board, and the tug *Rescue* began the tow to Charleston, that port being made without any further difficulty.

On the way back to New York a few months later, the *Arapahoe* reversed roles and this time became the good Samaritan of the sea. The would-be rescuer at the time of the *Arapahoe's* distress, the SS. *Iroquois*, was disabled—almost in the same spot—helpless without a rudder and sending out calls for help. Under forced draft, the *Arapahoe* reached her in a few hours and soon succeeded in passing a tow line aboard. The long tow to New York began. A gale was encountered off Atlantic City and the towing hawser pulled the bits right out of the *Iroquois's* foredeck. After some difficult work, the line was again secured to the disabled vessel and the tow resumed. Both ships reached New York without further incident and the newspapers again made much of the striking utility of wireless as a safeguard for shipping.

To Theodore D. Haubner, therefore, goes the distinction of having not only sent the first American SOS at the age of 19, but also of receiving what was probably the second use of that now well-known call of distress. Mr. Haubner is now engaged in business in New York.

SOS has remained the unchanged and supreme distress call of the sea, although with the extension and development of the automatic alarm devices, a new signal has been used in conjunction with it. The automatic alarm, as used by some European nations, consists of a sensitive receiver and relay which, on the reception of four or more dashes, each of exactly four seconds' duration, closes switches which operate alarm bells in the radio room, operators' cabins, and on the bridge. It is designed and intended for use when the regular operator is off watch. While the British and some other nations accept it in lieu of a regular operator, or qualified listener, the American radio authorities, after exhaustive tests, seem to have remained sceptical as to its efficiency and, at the present writing, it is not in use on American ships nor is it accepted as a substitute for regular operators. Thus, in an age when the machine is constantly displacing the man, we have at least one setback for the robot. Undoubtedly, however, it will not be long before engineering skill succeeds in overcoming its present deficiencies and perfecting its performance. The stand of the American radio authorities is quite logical and is not based on any hypercritical conservatism or hostility. The automatic alarm, before it is legally permitted to replace the human listener, should not only prove that it is just as efficient as a regular, trained operator but it must also be infallible. One of its major defects seems to be its disposition to go into operation when no distress call is being transmitted. A false alarm is annoying enough, but a more serious charge against the robot listener is that occasionally it will fail to go into operation when an actual SOS is being sent. On this ground the American authorities are naturally conservative and have indicated they will not accept any automatic alarm device which might fail in this supremely important respect. No official would care to take the responsibility of approving and permitting the use of a piece of apparatus which might fail to function just at the time when some ship nearby was foundering with loss of life after it had transmitted a distress call which the robot listener had failed to hear. No competent operator, even though he



(Continued on Page 19)

# CDR. KARL H.W. BAARSLAG 175-SGP

BY- DON THOMAS

Karl H. W. Baarslag, perhaps known to more maritime radio operators than anyone thru his book "SOS TO THE RESCUE", passed away on January 10th, 1984, in Florida. He leaves a widow, Esther, and two sons, Karel and Eric. It is with a heavy heart that I write this. I had known Karl since the 1920's, when he was radio officer on P.K. Mellon's yacht "VAGABONDIA". After we both married, our families were often together, in D.C. and in Florida; our sons attended college together.

While on the Vagabondia, Karl wrote other books - "COAST GUARD TO THE RESCUE", and "ISLANDS OF ADVENTURE", telling of the yacht's visits to remote islands.

Karl was born in Grand Rapids, Michigan, of Netherlands parentage. He served in the Merchant Marine after World War I, but sailed mostly on yachts until 1939. Commissioned in the U.S. Naval Reserve in 1936, he was assigned to the Office of Naval Intelligence in Washington after Pearl Harbor, due to his specialized knowledge of Communism. In the early days of our radio operators union, ARTA, Karl was foremost in fighting the Communists who were infiltrating the union and spreading propaganda at every opportunity.

In 1944 he was ordered overseas as special U.S. representative on the staff of Marshal Montgomery for the invasion of the Netherlands and northwest Germany. His secret group was charged with the seizure at assault level of all top secret intelligence targets as the front advanced. This meant persons, weapons, documents, buildings, and military targets of any classified intelligence value. He had just finished a book about this little-known operation but died before a publisher was found.

Karl was with the American Legion headquarters from 1947 to 1953, in charge of their counter-subversive activity, and founded the Legion's anti-Communist newsletter "The Firing Line". He was Director of Research on the Senate Committee on Investigations, and consultant to the House Un-American Activities and Senate Internal Security Sub-Committee, chaired by Senator Styles Bridges, from 1953 to 1960 until he retired to do lecturing and writing. He wrote many books and articles on Communism, military morale, survival, and Soviet total war. His homes were in Tequesta, Florida, and Rodanthe, Hatteras Island, S. C.



The Yacht Vagabondia - WSBO owned and used by the W.L. Melon family. She was equipped by R.C.A. and cruised the world. Karl Baarslag was Radio Operator for W.L. Melon on his yacht for a number of years. His first assignment was in 1924 on the Yacht Oceanus/KFYC and thereafter he served on about 15 other sea-going yachts plus the S.S. Eastern Dawn/KUQT a freighter equipped with arc equipment.



During WW-2, Karl Baarslag served his country assigned mostly to 'Intelligence' work. He was on the staff of Marshal Montgomery, on leave from the Navy where he held commission at Lt. Commander. Here we see Karl in a light armored car in Holland.. He held many top intelligence position in our government during the war and afterwards. Athan Cosmas, one of his close friends reported that Karl was the first U.S.Navy officer to reach the Naval base at Kiel, seizing it with British troops five days before the formal signing of the armistice.

were occupied with traffic, were half asleep, or absorbed in some murder mystery thriller, could fail to distinguish the electrifying and arresting SOS SOS SOS. A machine, through improper adjustment, mechanical failure, distance, heavy interference, or other conditions, might fail to spring to life at the broadcasting of the spaced dashes. To set off false alarms is a minor imperfection; but to fail to respond, when an SOS is actually whining through the air, is a fatal and unpardonable defect in any automatic alarm device.

On May 31st, 1929, there was signed at London an "International Convention for the Safety of Life at Sea." It abrogated the previous convention of 1914. Seventeen leading maritime nations, including the United States and the U.S.S.R., participated. Its purpose was the promotion of "safety of life at sea by establishing in common agreement uniform principles and rules directed thereto. The scope of the conference was all-inclusive—construction of vessels; bulkheading, etc.; life-saving appliances; radiotelegraphy; safety of navigation; and a uniform system of certificates. Most of the signatory nations, including Great Britain, France, Italy, Germany, Denmark, Netherlands, Sweden, and Norway, have ratified the Convention as effective January 1st, 1933. The United States is one of the few "hold-outs." It will probably be taken up by the incoming Senate in 1935.

One of its provisions is the compulsory equipment with radiotelegraphy of all ships over 1600 tons, gross. As pointed out elsewhere in this work, American radio laws have been woefully inadequate and far behind those of so-called "backward nations." As the unquestionable value of radio was demonstrated year after year by a marked and steady reduction in shipping losses and by the resultant decline in loss of life at sea, other nations increased the scope and stringency of their radio laws so

that all foreign ships over 1500 or 1600 gross tons were already compulsorily equipped with radiotelegraphy prior to this last Safety of Life at Sea Convention. Only America lagged. The ancient statute of 1912, passed under pressure of the *Titanic* horror, which requires two operators and a continuous watch only on ships carrying 50 or more persons has been deemed adequate and sufficient protection for life at sea despite the quite obvious fact that it left a wide loophole for all vessels irrespective of tonnage or length of sea voyage if they carried 49 persons or less. The practical result has been that foreign ships have carried the burden of greater radio protection while American shipping has saved some expense through the inadequacy of American radio laws. When the *Vestris* sank with a heavy loss of life, an American ship, the *Montoso*, of 3000 gross tons, passed within a few miles of the sinking liner, while the distress calls were hurtling through the air, and heard nothing. When she arrived at Boston from Puerto Rico, it was all news to her surprised crew. She had no radio operator, as she was exempt under American law. Had she been British, German, Danish, Italian, or Greek, she would have been radio-equipped, and it is quite within the realm of possibility that most of the lives lost in that disaster might have been saved, as, on a one man ship, the operator would have been on watch when the *Vestris's* SOS screamed through the ether at ten in the morning.

It is to be sincerely hoped, therefore, that the United States Senate, in the interest of greater protection of life at sea and with the obvious justice of bringing American radio laws into reasonable conformance with uniform international rules and principles of safety, will either ratify the International Convention of 1929, or initiate suitable and parallel American radio laws. The recent *Morro Castle* disaster will undoubtedly expedite official action.

### THE INTERNATIONAL MORSE CODE

A	.-.	M	---	Y	-.---
B	-...	N	---	Z	---..
C	-.-.	O	----	1	-----
D	-..	P	----	2	..----
E	.	Q	----	3	...---
F	..-	R	.-.	4	....-
G	---	S	...	5	.....
H	....	T	-	6	-----
I	..	U	..-	7	----..
J	....-	V	...-	8	---...
K	-.-	W	....	9	-----
L	.-..	X	...-	0	-----

Commonly used abbreviations and other signals :

XXX	Urgent signal (less urgent than an SOS)
TTT	Safety Signal used to precede ice, storm and other navigational warnings
CQ	General call to all stations
Medico	Call for medical advice or assistance
K	Go ahead
R	O.K., understood, right
AS	Wait
GM	Good Morning
GN&GE	Good night & Good evening
73	Best regards
TU or TKS	Thank you, thanks
QRT	Stop sending
QRU	I have nothing for you
SK	Finish of all transmission
---..---	High power warning; exclamation mark
QRL	I am busy, please do not interfere
C	yes
N	no
CL	I am closing my station

EDITOR'S NOTE: I hope you have enjoyed reading Chapter One of Baarslag's book. "SOS TO THE RESCUE". Next issue I plan to bring you Karl's story of the Sinking of the CPR Liner - Empress of Ireland which sank 5-29 1914 in the St. Lawrence River with toll of 1024 lives. The Ireland's Call was "MPL".

# 1920 - First Pacific Coast Radio Convention-Held



## Avant-Garde of Radio Pioneers

WERE YOU THERE ? This is the largest group of radio-men ever assembled in the Pioneer Days. It was the First Pacific Coast Radio-Convention, held in San Francisco - Nov.25-27 1920. A few identified as follows: (1) Major Dillon; (2) Bernard H. Linden (3) Charles H. Blake; (4) Carl C. Langevin; (5)William A. Breniman (6) URTA Group R/O-MM; (7) S.F. Radio Club; (8) Polly-Tech.Radio Club, S.F. Some excellent displays of early day equipment shown.

## S.O.W.P. Members Historical Gatherings

Random Groups of SOWP Members shown below and onpage 21. These have been received from Chapters or Chapter members. Suggest that you furnish good pictures of past or future gatherings and send to us for use in some of our future publications. Names omitted in these pictures as space does not permit inclusion. How many of your old friends or shipmates can you find ?



PIONEER TRIO - EGOLF - BRENNIMAN - RASER  
PICKERIL CHAPTER XI MEETING - NOV. 1984



CHAPTER III - LONG BEACH - 1970



JACK BINNS CHAPTER - PORTLAND AREA SOWP  
MEETING Oct. 12 1977 - PORTLAND, OREGON



GOLDEN GATE CHAPTER - I (Maass Photo).



SOWP PICNIC 1971 - BIXBY PARK, LONG BEACH, CA.



CAPITAL AREA CHAPTER [ X ] FALLS CHURCH VA. 1983



GOLDEN GATE CHAPTER - I  
SEA WOLF, JACK LONDON SQUARE,

# San Francisco From November 23 to 27th 1920



GOLDEN GATE CHAPTER \_ VILLA CHARTIER 1981



FIELD TRIP GG. CHAPTER TO KPH - 1974



SOWP SWISS CHAPTER MEETING IN ZURICH - 1982



STAR OF INDIA CHAPTER MEETING - 1976  
BROWN BAG LUNCH IN 'ORLOP DECK



GULF COAST CHAPTER MEETING, NEW ORELEANS 1982



ERNIE WILMSHURST (L) Brandy Wentworth (R)  
AWAITING ARRIVALS FOR SOWP CHAP. IV MEET. 1976

# Radio Marketing for the Farmer

RADIO FOR FEBRUARY, 1929



Map of Radio Network

A CENTRAL CALIFORNIA farmer was recently offered 60 cents a bag for his crop of onions by an agent who seemed very eager to buy. Suspecting that the buyer was armed with a superior knowledge of the marketing situation, the farmer got in touch with the Federal-State Marketing Service radio station, KRB, at Salinas, California, asking for a report on crops and current prices. KRB referred the question to the San Francisco station, KRG, where trained market analysts investigated the onion situation and reported at once that onion crops had been badly damaged in other sections and that the demand was on an upward trend. KRG sent the report back to Salinas and the farmer, no longer at a disadvantage, refused the offer of 60 cents, later selling at \$1.65.

This is a typical example of what the U. S. Department of Agriculture and the California Department of Agriculture are doing for the California farmer. Guided by Mr. B. H. Critchfield, Chief of the Division of Markets, the Federal-State Marketing News Service gathers, analyzes and disseminates information regarding the eastern and foreign markets; the supply and demand of farm produce. Effectually, they are equalizing the bargaining power of the farmer with that of the produce buyer.

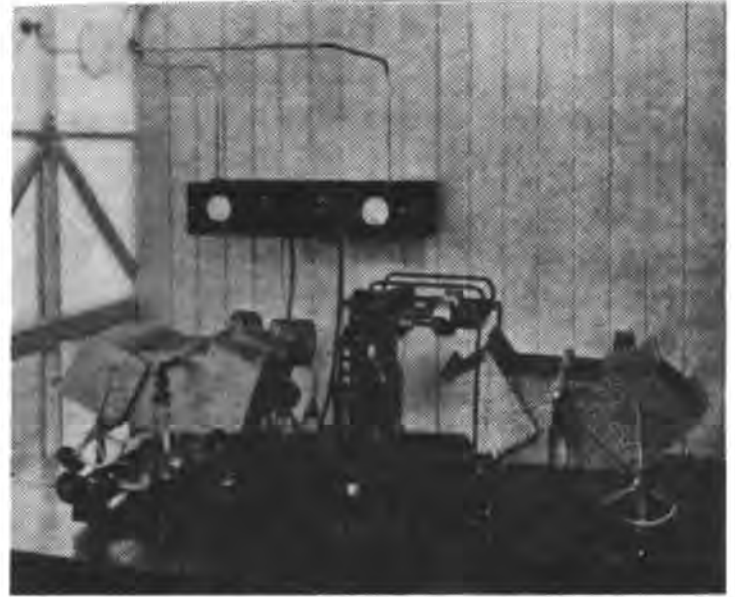
Six thousand men are in the field to gather this information and send it to Washington for analysis. From here it is sent to San Francisco by leased wire, whence it is relayed to all points in the short-wave radio network.

KRG, the control station at San Francisco, is a 500-watt station, operated on a wavelength of 32.4 meters. The outstanding features of the equipment are its commercial appearance and workmanship combined with its adherence to the low loss principle.

The transmitter is mounted on a cast-iron frame, the separate circuits being isolated from each other with specially moulded pyrex insulation. The condensers and coupling controls are operated by step-down gears, the scales on the rotor plates passing in back of a marker. The two meters on the antenna condenser panel are thermo-couple ammeters in the antenna and counterpoise circuits.

On the power control panel is mounted the filament and plate switches, filament voltmeter, input ammeter and high-speed keying relay, which breaks the circuit in the primary of the plate transformer. This is a plunger type relay, designed by Ralph Heintz, builder of the apparatus, for continuous operation with a minimum of heating. A tuned-plate tuned-grid, self-rectified circuit is used, employing two UV 204-A tubes which are supplied with 500 cycle a.c. from a 2 k.w. General Electric alternator. The resulting oscillation, modulated at about 1000 cycles, is very steady and pleasing to copy.

The transmitters at the field stations are 100 watts in power, self-rectified, and are more or less portable so that they may be moved during the various seasons to more active agricultural centers. A great deal of experimental work was carried on by the engineer in charge, Mr.



500-Watt, 32.4 Meter Transmitter at Control Station KRG

Herbert J. Breuer, prior to applying for a certain frequency, in order to determine which was best suited for daylight communication over specified distances. The final choice of 32.4 meters is found to carry much better to Los Angeles and El Centro than to shorter distances such as Sacramento. This is due to the skip distance phenomenon characteristic of short-wave transmission.

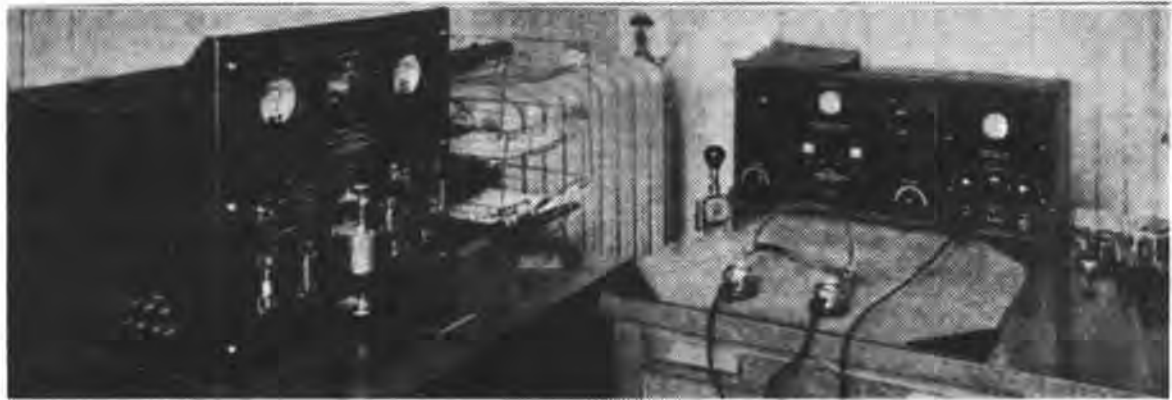
The receivers at all stations are tuned-grid tuned-plate detectors with two stages of a.f. amplification. With plug-in coils they will cover the range of from 10 to 100 meters.

The operators holding down the various stations are on the job from 7 a. m. until 4 p. m., ready to copy the bulletins that are constantly pouring into San Francisco from Washington to be trans-

mitted to the network by KRG. The daily traffic over KRG has been averaging 3500 words, most of which is handled at from 30 to 38 words per minute, the operators being among the fastest in the profession. Between bulletins from the eastern and foreign markets the air is filled with reports from the farmers themselves, weather reports and requests for information.

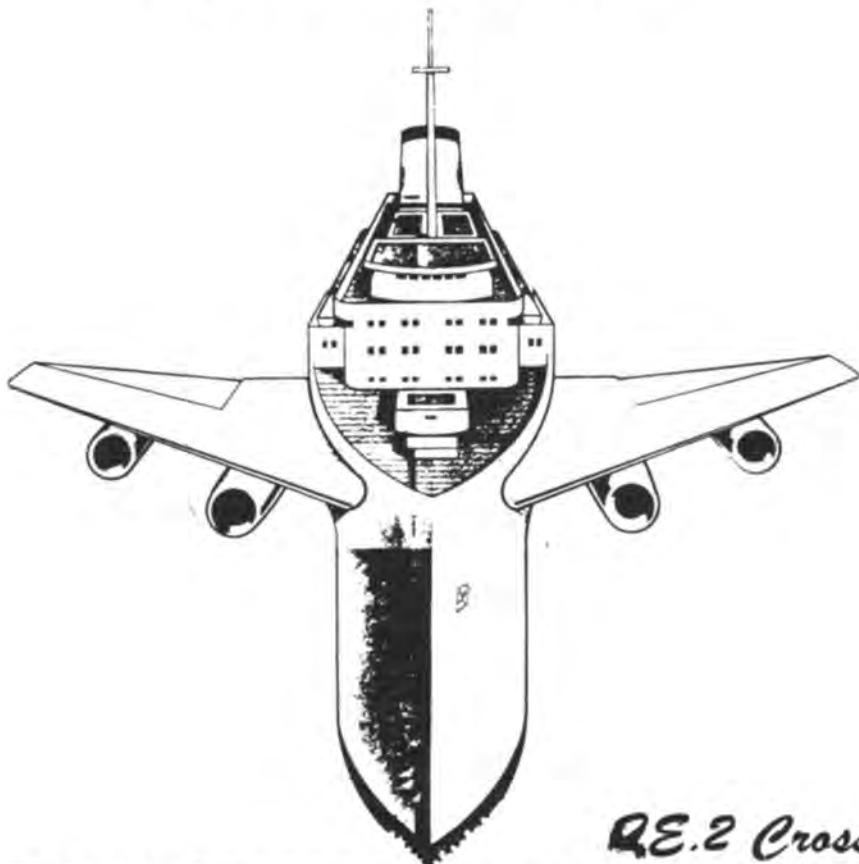
And so, by the use of short-wave radio the California farmer is being supplied with hourly information regarding the supply and demand, current prices and trend of the markets for his produce in all parts of the world. He is now able to intelligently distribute his crops, and retain for himself and his community the largest part of the consumer's dollar.

CALL LETTERS KRN - San Francisco, KRJ - Sacramento  
 KRK - Sebastopol KRB - Salinas KRM - Los Angeles  
 Call for Fresno is thought to be KRN. El Centro / Brawley  
 Call book on hand do not furnish Calls of all net stations.



Power Panel and Receiver at KRG

## The Ultimate in Travel



QE.2 Crossed with a B-747



### HISTORICAL SAN FRANCISCO

Telegraph Hill, site of a signal station built in 1849 to inform business men in San Francisco of the names and time of arrival of vessels entering the bay. In 1853 the signal station was replaced by a telegraph line which gave the hill its name.

Parrott Granite Block at California and Montgomery Streets. The first fire-proof building in San Francisco, erected in 1852 by John Parrott, from granite blocks dressed in China.

First U. S. Mint in California, 608 Commercial Street. The first U. S. Mint in California was established here in 1853. It was closed in 1874. The mint had a capacity in gold coinage of about \$39 million a year.

Office of THE STAR, Clay and Brenham Streets. Site of San Francisco's first newspaper, started January 9, 1847, by Samuel Brannan and Elbert Jones. In 1849 the name of the paper was changed to the ALTA CALIFORNIA, published until 1891.

Presidio of San Francisco. The first settlement in San Francisco, founded September 17, 1776, by Lieut. Jose Joaquin Ortega. The presidio has existed as a headquarters for Spanish, Mexican, and American military forces continuously since its founding.

A famous philanthropist was once asked: "How are you able to give so much and still have so much?"

"Well," replied the generous man, "as I shovel out, He shovels in; and the Lord has a bigger shovel than I have."

# THE DEVIL'S TRIANGLE

By- Prof. H.J. Scott 837-SGP



"One can't believe in impossible things",  
(Alice Through the Looking Glass by Lewis Carroll)

A while ago in one of those weekly newspapers you see at the checkout counter of your grocery store, an article caught my eye. There were headlines proclaiming "Devil's Triangle Mystery Solved! Soviet scientists in race to turn eerie power into a super weapon!" According to the article, the awesome secret weapon that the Russians allegedly discovered is the generation of intense sound waves capable of destroying everything in their path! Supposedly they could be directed against ships and aircraft hundreds of miles away!

These destructive waves are presumed to be spawned by certain storms taking place within the Devil's Triangle. How they are generated is not disclosed. However, they are said to be in the infrasonic range of 15 Hertz or less. This is a region below the threshold of our hearing.

According to the article, these waves can be directed across water, through water, and can destroy a vessel in calm seas hundreds of miles away. In cases where the vessel failed to sink, the crew and passengers would die from their bombardment by these very low frequency waves. The theory advanced is that this sound energy can rupture human arteries and send the heart out of control until it fails.

Now I will tell you that there is none of it that I believe! I suspect that the story of the Devil's Triangle is some reporter's modern version of the biblical story of the "Walls of Jerico". It makes a good tale like the "Wizard of Oz".

In fact, in 1919 following my stint in the Atlantic during WWI, I was on the New York, Caribbean, South American run for a long period of time. Consequently, I have sailed through the Devil's Triangle many, many times. Never once did we ever experience anything threatening in this area other than the normal storms, some quite severe and an occasional ship in trouble due to natural causes.

There are many such anomalous areas in the seas of this world where ships seem to get into trouble at times. The ones with which I am familiar are the Caribbean, with its hurricanes and water spouts, the North Pacific with its devastating typhoons, the area off the Oregon coast including the Columbia River Bar, often called the graveyard of the Pacific Coast. Then there is the area of the Yellow Sea between China and Korea. There are several others which I have heard about, but have never been to in my travels.

So I cannot help but wonder why we concentrate on the area in the Atlantic, where ships have been lost in the same manner as in many other places and call it the Devil's Triangle to the exclusion of other similar ones.

If we examine these various areas carefully we will observe that each of them is an area where a considerable density of shipping occurs and hence from a statistical point of view, the probability of ship loss is higher in these regions.

Now let us for a moment consider the practical aspects of the claims made by the newspaper article concerning the military value of this business. Suppose we accept a frequency of 15 Hertz. For this frequency the wavelength of sound in air is given by:

$\lambda = v/f = (1,000 \text{ ft. per sec.}) / (15 \text{ Hertz per sec.}) = 67 \text{ ft.}$   
A parabolic reflector capable of focusing a reasonable beam of this or of any other frequency should be of the order of 10 wavelengths of 67 feet, the dish should be approximately 700 feet in diameter, a rather large parabola. If it is to be readily maneuverable in directivity and also transportable from place to place as a necessary condition for military use, it becomes ridiculous!

I simply ask you to form your own conclusions. As for me I do not believe in the Devil's Triangle.

# "CQ" THE GLASS ARM

By Walter H. Candler

It must be understood at the outset that there are many things which contribute directly or indirectly to the weakening of the telegraphers' and writers' arms. Medical authorities are fairly unanimous in the opinion that the principal cause is a toxic condition of the system resulting from some focal point. These infections, usually of such minor importance they escape notice, poison the blood-stream, superinducing inflammation of the nerves and muscles at the weakest point. With the telegrapher, bookkeeper, clerk or anyone doing much writing, the weakest point usually is his arm.

Now, the question arises: Why is the telegrapher's or writer's arm his weakest point? What about the arms of athletes, laborers and others, skilled and unskilled? They become stronger with use. Did old Mother Nature fail to make such bounteous provision for the arms of the telegrapher and penman? We are inclined to believe this when we consider that their arms, wrists and fingers become weaker and less responsive with continued use, rather than stronger and faster.

The condition, diagnosed as Vocational Neuritis, which sometimes yields to medical treatment, is one thing, whereas the condition recognized as "Glass Arm" is another. The symptoms often are similar—with one ever-present exception, namely: In true neuritis there is inflammation or soreness; in true glass arm there is neither. At first there may be sensitiveness, but this soon subsides and the arm gradually loses its erstwhile snap and responsiveness. Dot letters are difficult to send correctly with the customary speed. The operator soon is aware that something is wrong—he cannot send the fast, accurate stuff he once did; others with whom he works tell him his sending is rotten. He is easily fatigued and is subject to various forms of nervousness, headaches, insomnia, loss of appetite; is easily excited and discouraged; he develops what psychologists term an Inferiority Complex which, among other things, greatly increases the nervous strain of telegraphing; in some instances to an alarming degree.

When this condition is caused or helped along as a result of some infected area, it is accompanied by pain in wrists, forearms, neck and back; frequently headaches and dizziness, irritability and various other disturbances. When the condition has been cleared up by medical treatment, these symptoms may disappear but the arm is ever afterwards weak; the old snap has gone out of it. Hence, you will observe that toxemia, causing neuritis primarily, contributes secondarily to the condition. To be more specific: its after-effects are manifested in the well-known malady—"Glass Arm."

But there are other causes for this condition. Consider, if you will, the unnatural position of the arm in telegraphing, which interferes with normal circulation, causing muscle and nerve strain in writing and sending; long confinement which lowers residual energy or body-tone; undue and prolonged pressure upon the table with the under part of the arm; and last, but by no means of the least importance, the ever-present negative suggestion that ultimately the arm is doomed to fail.

Suggestion is a powerful factor. Young operators hear old ones complaining of the weakened condition of their arms and it is suggested to them inadvertently that it's only a matter of time until they, too, will have Glass Arm.

When a weak arm has been neglected, there is danger of the muscles and nerves becoming atrophied, resulting in paralysis. It has not been so long ago that the seat of all forms of paralysis was found to be in the brain—that the paralyzed arm or other member was but the result of such brain condition. This is not always applicable to telegrapher's paralysis, but when found so in isolated cases, even then there remains much doubt unless the diagnostician is as familiar with Psychology as with Physiology and capable of differentiating between Brain symptoms on one hand and Mental on the other.

To go into this subject thoroughly would entail an exhaustive discussion of reflexes which limited space prohibits. Suffice it to say, however, that every muscular action is in response to a mental impulse. For example: The impulse of dots, dashes and spaces in certain proportions is sent out along the nerve corridors by the brain; the hand on the telegraph key, aided by normally functioning nerves and muscles, responds—does what the mind commands; then, by virtue of many repetitions, the Conscious Mind gradually places its responsibilities onto the Subconscious Mind. Habit is formed. Habit is anything we can do without conscious thought; that is, writing, sending and receiving a message while thinking of something else. Skill in doing

anything indicates that we do it subconsciously, particularly is this true of telegraphing; that's why it is so hard to learn, especially the receiving end of it.

When the Subconscious Mind sends out an impulse for six dots and the hand falters, making four dots space, two dots or five or eight dots, the Conscious Mind jumps in and endeavors to make the correction. Trouble ensues here which I shall not discuss now. A repetition of this conscious interference causes an unbalancing of the mental and nerve system which interrupts co-ordinative work. The result is that the operator puts forth more effort to make dots and dashes correctly. This is a strain, and the "up-set" or "nervous" operator soon is working against himself, like one trying to swim up a swift stream.

While telegraphing, the arm is in an unnatural position. The blood cannot circulate freely to the extremities as if it were being used in swinging motions. Pressure on the table not only retards circulation but interferes with nerve functioning, after the manner of anything interfering with a grid, sounder or line circuit. The muscle and nerve tissues become impoverished and their vigor and elasticity diminish. Capillary circulation becomes weak and, in advanced cases, ceases altogether. The hand usually is cold, clammy, and while there may be no pain to speak of, the victim is aware of an uncomfortable feeling from the tips of his fingers to his elbows.

Now, the question of a remedy arises. Will exercises help?

If the condition is true Neuritis, and only a capable physician can determine this, exercises of any kind will do more harm than good. Exercises should not be taken until the cause has been cleared up; then, certain exercises will help to build and develop the small muscles of the arm, which, in time, if followed properly under the direction of a physician or one who understands the condition, restore it to its normal state where it will respond readily to the mental impulse. It must be understood however, that just any kind of exercise will likely do more harm than good. As with medicine, so with exercise: "What will cure one will kill another."

I have had occasion to interview many celebrated musicians, artists, and others doing work that necessitated the free, easy action of their hands, arms and fingers. In every instance I found that the "right kind" of exercise constituted part of their daily routine.

How necessary then are corrective exercises for developing the telegrapher's arm? He needs certain exercises to promote free circulation to his finger tips, to rebuild broken down cell tissue and carry off the dead cells. He needs other forms of special exercises to develop the small muscles as they should be developed in a telegrapher's arm, not like those of a blacksmith, laborer or strong man, to promote uniformity, rhythm, normality, speed, accuracy—skill.

A muscle-bound arm cannot send on a telegraph key. Many cases of so-called cramps of various forms, verging on paralysis, in some instances, are muscle-bound conditions brought on by the wrong kind of exercises. I say positively, and any physician will bear me out, that indiscriminate exercising frequently does irreparable harm. The antiquated methods of certain well advertised physical culturists may give a telegrapher large, beefy arms that are useless for sending or writing.

The wrestler and prizefighter need different systems of exercise. The ball player, sprinter, distance swimmer, walker and tennis player—all, must take specific exercises to develop certain muscles in the right proportion to meet their requirements in muscular control and reflex co-ordination necessary to skill and perfection. The champion wrestler of the world would be helpless in the prize ring with a Jack Dempsey. He has great, bulging muscles, it is true, but they have been trained to pull, tug, twist and hug—not to strike a blow; and what would Dempsey do in a tennis court pitted against a Tilden or Willis? He could hit the ball with greater force than either, but they soon would easily defeat him because their muscles have been not only properly developed, but trained to co-ordinate in playing the game. Their minds, muscles and nerves function together.

That the Mind and its proper functioning plays the most important part in telegraphing, no one can question; hence it is quite obvious that many cases of Glass Arm can be traced to improper methods and a lack of mental and muscular co-ordination. At another time I shall be glad to discuss this phase of the subject and pass along the benefits of my experience in handling many thousands of cases during the past 20 years.



# TASK FORCE 99

RICHARDSON S. ROBERTS

By January 1942, Hitler's troops were near Moscow and the Russians desperately needed the war materials "The Big Three", Roosevelt, Churchill and Stalin, had realized could only come from America. The one possible route for delivery was to ports not held by the enemy; for Moscow, up and around the North Cape of Norway to the ports of Murmansk and Archangel.

But convoys from America that even reached Iceland safely had only begun their hazardous runs. German submarine pens and torpedo-bomber bases were located short distances away all along the Norwegian coast.

By far, the greatest threat, however, was the possibility of attack by the four powerful modern German battleships, Von Tirpitz, Admiral Hipper, Admiral Scheer or Lutzow, known to be anchored in the Norwegian fjords. To counteract this threat, Britain needed more heavy ships. And again, America was to supply that need.

Official Navy Department orders assembled a "force of expediency" to operate with the Royal Navy for that purpose. Under Rear Admiral Robert C. Giffen, Jr., U.S. Navy, with the navy's newest battleship USS Washington as his flagship, the aircraft carrier Wasp, the cruisers Wichita and Tuscaloosa, and the destroyers of Destroyer Squadron 8 were the vessels under his command. This force, designated as Task Force 99, sailed from Casco Bay at Portland, Maine, for Scapa Flow on March 26, 1942.

I was flag chief radio man on the USS Washington when that force left Casco Bay. I remember that the north Atlantic U-boat hunting ground was cold and rough during that stormy crossing. Under strict radio silence and communicating only by visual signals, we plowed along, plunging up and down, with the destroyers rolling and pitching around us. We darkened ship every night and manned battle stations at general quarters one hour before sunrise each morning, with the ships' lookouts and our new secret radar continually on the alert.

The USS Washington, a beautiful ship now obsolete, "entered the service of the Navy as the most powerful and fastest ship of the line" on May 15, 1941 (The Philadelphia Inquirer). I was proud of that ship when I escorted my wife and my two boys, 8 and 5, aboard for our 1941 Christmas dinner in her CPO mess.

I was assigned to "the Flag" on the Washington, with responsibility for the radio messages of the Admiral and his staff. My battle station was in "Flag Radio"; abaft of "Flag Plot", the Admiral's station two levels (and seven ladders up from my bunk) above the ship's bridge. When not at general quarters, my flag radiomen stood watches with the ship's operators and I was in charge of all radio communications for the ship and the flag.

Scapa Flow at the extreme north of Scotland was the base of the British Home Fleet. We had scarcely tied up to our moorings there, when a Royal Navy "Leftenant" came aboard with a "communication liaison team" to teach us their radio procedures and some of the enemy's tricks.

German radio operators had succeeded in imitating the keying rhythms or "fists" of British operators during nineteen months of war. They sent false position reports, ostensibly from Allied ships, that confused anti-submarine operations. They actually receipted for messages from British ships as though, and often before, British shore stations received them. Methods developed to combat those practices were part of our instruction.

Leading Petty Officer W/T Arthur Snellock, in charge of the British ratings, was to be our instructor and become my good friend. The first thing we learned was that W/T means wireless telegraphist in their navy; not water tender, as in ours.

When I told Snellock, "we have quite a job", he gently corrected me. "You have quite a job, old boy. My orders are to teach you. Your men are your responsibility."

So I became a schoolteacher. Not only for my boys on the flag, but also for the ship's radiomen. There was always one crew on watch so repeat classes were necessary. And Snellock was on hand at each session, promptly though courteously correcting my mistakes.

We were still learning when we left Scapa Flow on our first sortie. A 25-ship convoy was approaching Iceland enroute to Murmansk. On the Washington we never saw any of them. Many miles away and out of sight, steaming second in a line of four battleships, our job was to keep between them and the coast of German-occupied Norway.

We heard them, however; distress calls on full power when the ships they lost were torpedoed and attacked by dive-bombers. The only trophies we could claim on that run were "Bluenose Certificates" for crossing the Arctic Circle.



Back in harbor again and checking traffic, I was shocked by an urgent message from the Wichita to the flag;  
"PLANE CRASH AT SEA...PILOT DILLON...RADIOMAN MOSS...  
both rescued...PLANE SANK...MCSS MAY HAVE SUSTAINED  
CONCUSSION..."

Aviation Chief Radioman Dick Moss and I had survived recruit training, had graduated from navy radio school, and served our first hitch in the navy together. Our "Navy Wives", back in Lewes, Delaware, were close friends. It was with a feeling of apprehension that I visited the sick bay on the Wichita that afternoon. He was the same old wise-cracking buddy, however; and I am happy to say, he made a full recovery.

Another convoy sailed in May, and we left port again with our destroyer escorts' sonars "pinging" for contacts. German submarines were said to be "thick as bees" around Scapa Flow. But it was a fatal accident, not an enemy attack, that happened on that trip. The tragic incident was announced later in the British press.

## "BRITISH BATTLESHIP COLLISION REVEALED"

"LONDON, May 23.—(U.P.) The 35,000-ton British battleship King George V collided with the 1,870-ton Tribal class destroyer Punjabi on May 5, 1942, off the west coast of Ireland, it was disclosed today."

"The King George V, one of Britain's new battleships, crashed through the engineroom of the Punjabi, and cut the destroyer in half."

King George V—It entered the Home Fleet in October 1940 and was the flagship during the hunt for the Bismarck. In the Mediterranean it supported the landing in Sicily, and in the Pacific it took part in the operations on Okinawa. It was one of the ships that anchored in Tokyo Bay at the end of the war. Withdrawn from service in 1957.



"Only a handful of the Punjabi's crew survived. Tribal class destroyers carry a complement of from 190 to 226 officers and men."

In our formation of ships, the escort destroyers held positions ahead, on each flank, and astern of the main force. The two destroyers in the lead took turns curving across in front of our column, starboard to port and port to starboard. HMS Punjabi started her turn too soon and in an instant, it seemed, the two halves of the doomed vessel were sinking slowly on each side of our column of battleships.

At 22 knots, a 35,000-ton battleship cannot stop in her own length. And when there were four ships in line ahead, there was nowhere to go, but forward. We could not stop. We could not even turn aside without plowing through the struggling men and shattered debris on either side.

HMS King George V, in the lead, passed through the wreckage almost immediately. Washington, next, came up just as the first of the Punjabi's depth charges exploded. Armed, set for subsurface depths, and ready for instant use, the lethal weapons continued exploding along our port side as the depth charge racks on her uptilted stern section sank below those settings.

We could only watch helplessly as the sea erupted at each detonation during the few seconds it took us to pass by. And hope, and pray, while the nearest destroyer off our starboard quarter slowed, then stopped, and picked up that "handful of survivors".

Rumor had it that our hull was damaged and the Washington was ordered to Reykjavik, Iceland. I had hoped to make that port. A 21-year old nephew of mine was stationed at an army installation there, and I obtained permission to go ashore. I still have the letter he sent aboard after that visit:

"Dear Uncle Dick:...should the opportunity present itself, I will yet see your battleship...I plan to bring along two of my friends...  
Sincerely, Bud."



However, the opportunity did not present itself. We were sent back to Scapa before I had a chance to show them around "my battleship".

Scapa Flow was a desolate place, but I still have some pleasant memories of those times. A visit to Snellock's ship. A real fireplace, logs actually burning, in the CPO quarters on HMS King George V! And the daily piping of "up spirits," a shot of good "British grog". ( They scoffed at soda fountains on our ships; but, were quick to buy our unrationed candy).

I played left field on the CPO softball team. We beat the Wichita, 7 to 5, probably because I was taken out after the fifth inning. I remember the warm beer at the shore canteen. And the cheerful advice, "drop an ice cube in it if you want it cold."

Lieutenant Douglas Fairbanks, Junior, joined us at Scapa, wearing the gold chicken guts (aiguillette) of an Admiral's Aide. I liked him. He took his regular turns as flag duty officer like everyone else. I remember that he came down to the CPO quarters one evening when one of his movies, "Safari", was shown. He told us "it was not one of his best" and it wasn't; especially the love scenes. But he sat through it with us and seemed to enjoy the "Oo's and Ah's" of the audience.

The highlight of our duty at Scapa was an inspection of our ship by King George VI of England. Excerpts are from The Glasgow Herald:

"The King was piped on board in traditional naval style. U.S. ratings in their smart white caps stood to attention "at quarters" on the decks, and as the bosuns' whistles shrilled to silence, a bugle sounded and the guard of honour of the famous U.S. Marines, breaking their own records for smartness, presented arms in a royal salute. The band began "God Save the King" as His Majesty set foot on the American quarterdeck, and high up over his head, the White Ensign of the Royal Navy floated out from the mainmast."

As I watched him move slowly through the ranks, I wondered whether he remembered the last time he had inspected an American battleship. I was on hand then also, a radioman first class on the USS New York at his coronation five short years before. Anchored at Spithead with us, for the Coronation Review of the Fleet, were the German battleship Graf Spee and the Japanese cruiser Asigara, on May 20, 1937. The Newspaper concluded with a bit of typical "British humor".

"The King paid a unique honour to the Merchant Navy by reviewing the big ships from a merchantman. From the small ship came the royal signal that the men of the Fleet expected from their King - 'Splice the Main Brace'".

"The signal means that every man in the Fleet may have a double issue of rum to drink the King's health, and as the American ships obediently hoisted the repeating signal, British tars wondered what would happen aboard the "dry" ships - perhaps a double issue of ice-cream soda!"

German spies undoubtedly had knowledge of the ill-fated convoy that left Iceland for Murmansk on June 28, 1942. Its thirty-three ships loaded with \$700,000,000 worth of war materials made it a special target. To make matters worse, a return convoy had left Murmansk for Iceland and the eastbound ships were due to pass it, off the North Cape.

The Washington left Scapa Flow on June 29, second in line, with Admiral Sir John Tovey, C-in-C Home Fleet leading in the battleship Duke of York. Our force this time included the British aircraft carrier Victorious, three heavy cruisers and a full squadron of screening destroyers.

The convoy had a heavier escort also; but, that was not enough. On July 2, the columns of ships were sighted and reported by two picket U-boats. Torpedo-bombers from Norway bases joined submarine wolf-packs in the attack.

The British Admiralty had been informed, on July 2, that the Tirpitz and Admiral Hipper had moved north from Trondheim, and the Lutzow and Admiral Scheer from Narvik, with a number of fleet destroyers. That information was not confirmed, however, and was not passed



on to Admiral Tovey or the convoy. The first indication, interpreted as meaning that the German battleships had sailed, was an urgent signal to the convoy on July 4, - "scatter!"

Our force under Admiral Tovey, which had turned back from North Cape that morning, reversed course at full speed. But there were no targets for our nine 16-inch guns. The German ships had indeed sailed to attack the convoy, but returned to port when a Russian submarine sighted them and radioed the alarm.

Nevertheless the damage was done. The convoy "scattered"; each ship on her own course, at her best speed. Escort vessels, under fire, were too occupied to help. The enemy did not need their battleships. That massive deployment of submarines and bombers took terrible toll of easy targets all over the Barents Sea. Of thirty-three ships, only eleven survived.

One did not have to be among them to picture that frightful slaughter; of desperate men, on flaming ships, in icy seas. Radio logs unfolded the drama, scene by scene; hopeless calls, frantic signals, from sinking ships out of sight and beyond help.

Seventy thousand of the two hundred thousand tons of desperately needed supplies arrived; but, the cost in men and ships was far too high. Prime Minister Churchill telegraphed Premier Stalin, with prior approval of President Roosevelt, "...with the greatest regret.. we have reached the conclusion that to attempt to run the next convoy.. would only involve dead loss to the common cause..we propose to despatch those ships to the Persian Gulf."

And so ended the mission of Task Force 99. We did not prevent U-boat sinkings. We did not avert air attacks. We could not even rescue survivors of vessels that were lost. But, no ship in a convoy was sunk by the German battleship Von Tirpitz, or Admiral Hipper, or Admiral Scheer, or Lutzow - while we were there.

===== 30 =====



LEGEND	CONVOY NUMBER	SHIPS IN CONVOY	SHIPS LOST	DATE ENGAGED
	PQ-16	34	7	May 1942
	PQ-17	33	21	July 1942
	PQ-18	40	13	Sept. 1942
	Trickle*	13	7	1942-43
	(*) Ships not in convoy but given protection			



CORONATION CRUISE, APRIL 15th-MAY 30th 1937

**U.S.S.**  
UNITED STATES NAVAL REPRESENTATIVE TO THE  
CORONATION OF KING GEORGE VI

**NEW YORK**

AMATEUR RADIO..... UN SIGS R...S...T...AT.....M.G.C.T.  
ON ..... 1937 AS PER SEED.  
EXCERPTS YOUR TRANSMISSION .....

EX-W3DZX-W6NNO      73    R. S. ROBERTS, U.S.N.      W3D70

SUVA



## AT THE GATES OF THE DAWN



BY CHARLES W. F. CARTHEW

**T**o many of the old-timers, the laying of COMPAC does not seem very long ago but 12 years to the new fry seems the beginning of the world. In 1962 a story written by Arthur Black was published in the "Zodiac" and we thought it might bring back a few memories to reprint at this time.

The Pacific has been sailed by navigators from the earliest times. It is generally accepted that vast immigrations stemmed from Africa, Europe and Asia, down through Indonesia. The Melanesians, or darker skinned races, finally settled in Fiji, New Caledonia, and the Solomons, and the lighter skinned Polynesians migrated from the north and further east into the many small islands of the Polynesian Triangle, which is bounded by New Zealand, Hawaii and Easter Island.

Dr. Peter Buck, a famous anthropologist who is part Polynesian, deals with these migrations in his book "Vikings of the Pacific." He believes that some of the Polynesians, before the thirteenth century, journeyed 4,000 miles from the Marquesas Islands to Peru, and brought back the sweet potato.

Europeans first learned of the Pacific from Marco Polo about 1280, when he told of a great sea east of Zipangu (Japan) with 7,000 islands, which could have been the Philippines.

Vasco Nunez de Balboa, of Spain, first saw the Pacific in September 1513, and in 1520 Ferdinand Magellan, for King Charles I of Spain, sailed into the Pacific round Cape Horn, and then circumnavigated the world. It was Magellan who named the ocean "Pacific" from its calm tropical waters.

Thereafter, navigators of most European nations found their way into this mighty ocean, the most famous of them being Captain James Cook with three voyages unsurpassed for skill, endurance and success.

Fiji was discovered by Abel Tasman in 1643, and the group was extensively charted by Captain Bligh when he sailed between these islands in his long boat, after he had been cast off by the mutineers of the "Bounty."



### Where Tomorrow 'Sez' "Good Morning" To Today

The 180th degree of longitude is mankind's dividing line. It is a fixed point for measurement of time and distance. Here, the sunlight, travelling west, changes its name from one day to another. Nature has taken that line to separate the brown skinned Polynesian stock from the dark Melanesian, to separate Coral atolls from coral fringed volcanic mountains, and, strangest of all, to separate the malarial regions from the non-malarial.

It is here that the Fiji Islands, with Suva their capital, lie in the vast Pacific. Fiji is a Crown Colony, ceded to Queen Victoria in October 1874, by King Cabobau and his High Chiefs for the Fijian people. There are some 320 islands in the group, ranging from the great island of Viti Levu, of 4,000 square miles, to coral islets a few yards in circumference. About 100 islands are inhabited.

Suva has a population of about 40,000 - European, Fijian, Indian, Chinese and peoples from many of the Pacific Islands.

The International Date Line, basically along the 180th meridian, is diverted to the eastward round Fiji and Tonga, the Aleutian Islands, and Chatham Island in New Zealand, for convenience. To the eastward of Fiji it is yesterday, and so we are situated "at the gates of the dawn."

Our wireless stations form the centre of a network reaching out 2,000 miles to eleven Pacific islands points, and radio telephone and telegraph to Sydney. The network resembles a spider-web on the map, reaching out into the French/British condominium of New Hebrides, French Polynesia, American Samoa - which has just achieved independence - the Kingdom of Tonga, and to the Gilbert and Ellice Islands.

The first submarine telegraph cable in the Pacific area was laid across the Tasman Sea between Sydney and Wellington in 1876. In 1879 Stanford Fleming, the civil engineer in charge of the construction of the Canadian Pacific Railway and its parallel telegraph landline, first proposed the laying of a submarine cable network across the Pacific.

The proposal was discussed on many occasions between the Governments of Australia, New Zealand, Fiji, Canada and the United Kingdom, under the sponsorship of Sir Stanford Fleming, until in 1902, under the aegis of those Governments through the Pacific Cable Board, the Pacific was spanned by cable and the service opened on December 7. The final route chosen was from Vancouver Island, via Fanning Island, Suva, Norfolk Island, with bifurcation at Norfolk to Brisbane and Doubtless Bay in the north of New Zealand.

The cable between Vancouver and Fanning Island remains the longest in the world - 3,450 nautical miles. Until the introduction of relays in the 1920's, the method of working these cables was by siphon recorder with translation by hand at each station. The attenuation of the signals over these long lengths pre-supposed telegraph operating of the order of perfection so that maximum speeds could be maintained.

The skill of the cable operators at Bamfield, Fanning Island and Suva major factors in the successful operation of the cable chain over those years.

Duplication of the system was contemplated, and in 1926 continuously loaded cables were laid between Vancouver and Fanning Island.

The telegraph cables will be abandoned when the telephone cable has been laid and proved. At the end of 1962, the original Pacific cables will have been in continuous service for 60 years, with the exception of three weeks during World War I when they were cut, off Fanning Island, by a German cruiser.

They have been singularly free of interruption over those years. On the Vancouver-Fanning and Fanning-Suva sections, there has been only one interruption in deep water, and that took place 500 miles from Vancouver, in 2,100 fathoms of depth, only last year when the ocean bed in the vicinity of the break was reported to be of a corrosive nature. The loaded sections, laid in 1926, have been faultless except for shore-end renewals.

Suva's knowledge of the Commonwealth Telephone Cable Project began with the visit in September, 1959, of Mr. H.H. Eggers, Managing Director; Mr. P.J. McCunn and Mr. D.G. Smith, who were on their way to Sydney for the successful conference which culminated in COMPAC.

In October, 1960, we were visited by the COMPAC Survey Party, Messrs. D.G. Smith, J. Bampton and J. Crouch, since when we have been really busy.

During 1961, we completed the COMPAC Terminal Building, a block of four flats for expatriate staff, and began building two blocks of flats for families of members of the crew of C.S. Retriever, which is based at Suva. During 1962, building of two new bungalows and a single staff mess was commenced, and currently concrete piles are being driven for the Suva Cable Depot.

Over the past three months, each cargo ship from Britain has been heavily laden with equipment for our terminal. The last three ships brought upwards of 200 packages each. Some packages were of power equipment of the order of six or seven tons. We continue to receive equipment by each ship.

Mr. R.W. Hobbah is in charge of the installation. He has four members of the F.1 staff assisting him at present, and four more are to arrive in June and July. The installation team of the contractors, Standard Telephones and Cables Ltd., under Mr. J.T. Marshall, now consists of ten busy men, and is increasing in numbers week by week.

During June, after assisting H.M.T.S. Monarch in laying the Tasman Sea section between Auckland and Sydney, C.S. Retriever will come to Suva, where the Spaniards in her crew will be replaced by Fijians. Because Fijians have a history of seafaring it is appropriate that the first cable ship to be based in Fiji should have Spaniards, in the wake of Balboa and Magellan, among her complement, and that they should be replaced by Fijians, in the wake of the Melanesian and Polynesian navigators.

Rudyard Kipling in his poem, "The Deep-Sea Cables" written in 1893, was truly prophetic when he wrote, "Men talk to-day . . ." - which ends with the allusion to speech travelling along the ocean beds to promote better understanding among the peoples of the world.



# Bartlett's Quotations

DEXTER S. BARTLETT SGP-145 who became a Silent Key March 15 1982 will long be remembered for the many fine articles he furnished the Society and which we have published over the years. He was our First Historian and also served as Ass't. Editor for "PORTS O' CALL" and other early publications. "Old Bart" was the 'handle' he enjoyed being called, researched 'Poems of the Sea' many years ago. We thought you might enjoy them, especially since this edition honors The Ancient Mariner.



Water, water, everywhere,  
and all the boards did shrink;  
Water, water, everywhere  
Nor any a drop to drink.

---Coleridge  
Ancient Mariner

And the wind plays on those great  
sonorous harps, the shrouds and  
masts of ships.

---Longfellow-Hyperion

There were gentlemen and there were  
seamen in the navy of Charles the  
second, but the seamen were not  
gentlemen; and the gentlemen were  
not seamen.

---Macaulay  
History of England

To most men, experience is like the  
stern lights of a ship, which illu-  
minate only the track it has passed.

---Coleridge

Every drunken skipper trusts to  
Providence. But one of the ways of  
providence with drunken skippers is  
to run them on the rocks.

---George Bernard Shaw  
Heartbreak House

A rotten carcass of a boat, not rigged.  
Nor tackle, sail nor mast; the very  
rats  
Instinctively have quit it.

---Shakespeare - Tempest

A ship is always referred to as "she"  
because it costs so much to keep one  
in paint and powder.

---Chester W. Nimitz  
Feb. 13, 1940

## FIRESIDE TRAVELS AT SEA

There is nothing so desperately mono-  
tonous as the sea, and I no longer  
wonder at the cruelty of pirates.

Tell that to the Marines - the  
sailors won't believe it.

---Redgauntlet

De wind can blow lak hurricane  
an' spose she blow some more.  
You can't get drown on Lac St. Pierre  
so song as you stay on shore.

---William H. Drummond

## BOSWELL'S LIFE OF DR. JOHNSON

Being in a small ship is like being  
in a jail, with the chance of being  
drowned.

I have a profound respect for the sea  
as a moral teacher. No man can be  
tossed about upon it without feeling  
his impotence and insignificance.

---Charles B. Fiarbanke  
("Aguecheck")

I have known the sea too long to be-  
lieve in its respect for decency.

---Typhoon Falk  
A Reminiscence

## ROBINSON CRUSOE

The night was thick and hazy  
when the Picadilly Daisy  
Carried down the crew and  
captain in the sea.  
And I think the water drowned em  
For they never, never found em.  
And I know they didn't come ashore  
with me.

---Charles E. Carrl

## THE CHANNEL PASSAGE

How holy people look when they are  
sea-sick.

## THE FIRST SAILOR

That packet of assorted miseries,  
which we call a ship



# NAVY NOTES

From TRW Systems, items of interest  
on the ocean and its inhabitants

**WAVES** The primary source of most ocean waves is the Sun. In heating our atmosphere, the Sun causes the air to rise and winds to blow. The winds stream across the sea and, by frictional drag, create ripples whose sloping surfaces are pushed by the wind into wavelets and finally waves.

The size of waves depends upon how strong a wind is blowing, how long it blows, and the extent of open water (the "fetch") over which it blows. In a small harbor or pond, big waves will never build up, regardless of the wind's velocity. But at sea, where it is possible to have a fetch of hundreds or even thousands of miles, the wind can build up immense, powerful waves.

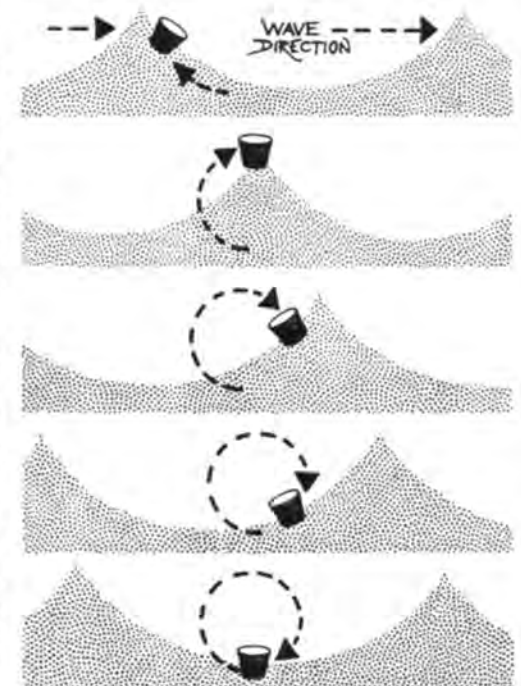
An old sea-going rule of thumb states that the height of a wave in feet (from crest to trough) will usually be no more than half the wind's speed in miles per hour. This means that in hurricane winds of 80-miles-per-hour, an average wave may be 40 feet. Individual waves, however, may tower over this average. In the tumult of a powerful storm, waves can combine, reinforce one another and form gigantic superwaves.

While many such giants have been informally reported, oceanographers generally agree that the largest accurately measured wave was recorded on February 7, 1933, by the United States Navy tanker *Rampo* enroute from Manila to San Diego. Its height: an awesome 112 feet.

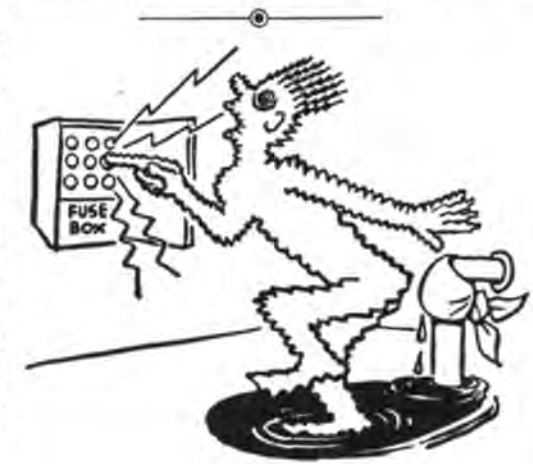
Land-based testimonies to the size and destructiveness of waves are plentiful. Buildings and lighthouses from 100 to 300 feet above sea level have been engulfed and shattered by waves. At Tillamook, Oregon, a wave once flung a 135 pound boulder 100 feet into the air, wrecking the roof and interior of the lightkeeper's house.

Some of the most destructive waves are not caused by the wind at all but by undersea earthquakes. Called *tsunamis*, these waves flash through the ocean at jet-plane speeds of 450 miles-per-hour. In the open sea, they are so low (about a foot in height) that ships may not be aware they are passing. When they reach shallow water, however, they can suddenly rise to towering heights of more than 100 feet. The *tsunami* which resulted from the explosion of the East Indian island of Krakatoa in 1883 was so powerful it went around the entire world, leaving its mark in

such distant places as tide gauges in the English channel.



Action of float shows that while wave forms travel, the water itself does not. When the wave has passed, the cork (and all particles of water) will not have moved substantially.



# Checking the Spectrum with Don de Neuf



## What You Always Wanted To Know—But Neglected To Ask ?

### TRUMPET TELEGRAPHY

By **REG. DONALD K. deNEUF**  
Box 229, Southbury, Conn. 06488

According to Gilbert's "Signal Engineering" (1920) the U.S. Navy had adopted a code for signalling by means of a trumpet or bugle. The method allegedly had been invented by a high school student of West Roxbury, Mass. (See chart below\*).

The system required no musical knowledge, but it was necessary to acquire what wind instrument players call a "lip" to produce the sound. The letters of the code are expressed by not more than four notes and all numerals by five, either "eighth" or "quarter" notes. The relative value of the "eighth" note to the "quarter" note is one-half. Therefore an "eighth" note is made by a short blast on the horn, and the "quarter" note by a blast twice as long. (The "eighth" notes are those having the small "pennant" at the tip of the stem).

Signals could be sent by this method in any pitch or "key" but changing the key in the middle of a message was "to be avoided in prevent confusion" — as was "slurring" of the notes.

Since the short and long notes could indicate dots and dashes, it is to be wondered why the system was not based on the International (Continental) code. But, despite the adoption of the International code as a worldwide standard, the U.S. Navy for a number of years employed its own telegraph code which had no resemblance whatsoever to any other code. The Navy, after some years, finally adopted the International code.

### U.S. NAVY BUGLE CODE —

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P
Q	R	S	T
U	V	W	X
Y	Z		
1	2	3	4
5	6	7	8
9	0		

ACKNOWLEDGEMENT, one long note

END OF MESSAGE, one high note

\*Thanks to Bill Gomes

## WHAT TIME IS IT ?



"TIME" says Webster is a system of measuring "duration". The practical standard for measuring time is based on the rotation of the earth. The early history of devices to indicate the passage of time and the "time of day" embraces sundials of various sorts, controlled trickling of water or sand, and even the burning of a candle marked with periods of "time". A primitive mechanical clock was invented about 996 AD. Actually the clock may be regarded as a machine to imitate the rotation of the earth. It is however not mechanically precise and must be considered a "secondary standard" of time which needs to be compared with and adjusted to the primary standard - the observed "rotation of the stars".

For many years "time" was strictly local, and commonly known as "sun-time" based on the transit of the sun across the meridian. This of course varied with the latitude of actual geographic locations - approximately one minute of time for each 13 miles of distance - or one second of time for each 1140 feet of longitude. For example "Sun Time" at the Eastern and Western extremes of the city of Chicago differs by about 67 seconds, and between the two ends of the San Francisco-Oakland Bay Bridge there is a difference of approximately 30 seconds. Each city and town adopted a time standard which was based on local "Sun Time" at the City Hall or some other designated location.

Railroads usually adopted the time standard of their home city or of some important city on its lines. A traveler from Maine to California would be obliged to change his watch some twenty times if he was anxious to constantly have his watch showing the correct "Railroad Time". In the railroad station in Buffalo there existed three clocks for a confused public to "tell time". One was set to New York City time - by which the New York Central Railroad operated, another was set to Columbus time used by the Lake Shore and Michigan Railroad, and the third was set to "Buffalo Time". In Pittsburgh there were six different time standards for the arrival and departures of trains. Pity the poor traveler trying to determine arrival and departure times when having to change trains! In Kansas City each of the leading jewelers furnished his own "standard time" - no two of which agreed - and often varied as much as twenty minutes. In order to have at least somewhat identical time within the area of a city, the "Time Ball" system was adopted in many places. Each day at "official noon" a large ball - often three or four feet in diameter and visible for several miles was dropped at noon from a tall mast. As the ball fell, people adjusted their watches.

With adoption of standard time zones Western Union, who had been supplying some subscribers in New York City with "accurate time ticks" from a precision clock in the U. S. Naval Observatory in Washington began the distribution of time signals on a nationwide scale over its Morse lines. The "lag" on the lines amounted to about 1/15th of a second from Washington to New York, and to San Francisco about 1/4 of a second. But this accuracy was vastly

superior to any other methods then in use: Master Clocks of the pendulum type were located in Western Union Central Offices, and these were corrected manually once each day through "time ticks" sent over the entire WU morse system at noon. Subscribers mechanical clocks were electrically coupled together in "slave fashion" into the Central Office Master Clock which would set them once each hour automatically. The company's standard called for master clocks to be accurate to within two seconds. In 1928 Western Union had over 130,000 subscribers to its time service. When synchronous electric clocks were developed and electric power companies began to systematically control their AC generators to provide "precision time" this resulted in the gradual disappearance of the WU Time Service. However, it was not completely phased out until 1973.

In 1869 a Telegraphic office was established in the Naval Observatory with lines connecting it to the Navy Department, the Washington Fire Alarm Telegraphic Office, and Western Union for the purpose of communicating "exact" time. This was the forerunner of the Navy's radio transmission of "time signals" which began August 9th 1904 over the NAA at Arlington, Virginia. Western Union in its time signal and clock service identified its source of information as "US Naval Observatory Time."

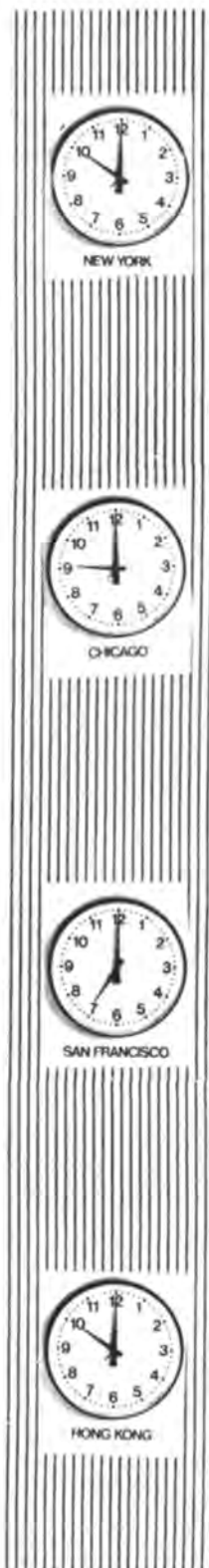
In 1923 the U. S. Bureau of Standards, aware of the growing importance of disseminating highly accurate time signals for the benefit of navigators at sea and in the air, radio broadcasting stations, scientific experiments, etc., established a radio station WWV in Washington for this purpose.

Today the NBS service operates from Fort Collins, Colorado (WWV) and from Kauai, Hawaii (WWVH). The stations transmit not only time signals 24 hours daily but also propagation forecasts, marine storm information and geophysical alerts. Transmitter radiated power is 10 KW on frequencies of 2.5, 5, 10, and 15 MHz, and antennas are phased vertical half-wave dipoles. At Ft. Collins there is also a "long wave" transmitter (WWVB) operating on 60 kHz using 13 KW of power into a top-loaded vertical antenna. It employs a somewhat different time code from that used by WWV and WWVH.

The time and frequency broadcasts are controlled by the primary NBS frequency standard in Boulder, Colo., and they are accurate to one part in 100 billion at all times.

As informative as the NBS publication may be, it does not contain any photographs of the stations or equipment. Dalt Bergstedt W6AUH visited the Fort Collins station and took photographs of some of the equipment. He reports that there is a large emergency power diesel generating plant which starts up automatically in the event of a commercial power failure. The master oscillators however are never affected by any power interruptions since they are all powered by independent battery systems.

D. K. deNeuf WA1SPM



"Notes! We have got to face it! The situation is serious! From now on in - ITS MEN AGAINST THE SEA - The radar has conked out!"

More of Merriken.

## Who Invented Television ?



The inventors block of four 20c commemoratives was unveiled by the U.S. Postal Service June 9 in Denver, Colo. The stamps will be issued Sept. 21 in Arlington, Va.

On September 21, 1983 the U. S. Postal Service is issuing a block of four stamps honoring four electrical-electronic scientists and inventors - Tesla, Steinmetz, Armstrong, and Farnsworth. Philo T. Farnsworth, for various reasons was not as well known and recognized as the other three.

An unbelievable amount of confusion exists in historical records as to "who invented television". Some speak of Nipkow with his mechanical circular disc containing spiral holes as the basic television inventor in 1884. Other credits are given to the Scotchman, John Baird. Most sources of information including encyclopedias and almanacs seem to indicate that Vladimir Zworykin (RCA) deserves the credit for the development of "electronic" television.

Herbert Moore, a social studies educator with philatelic and musical interests became curious as to just what part Farnsworth played in the development of TV - after 24 years of his teaching that television was invented by Zworykin! He spent many hours of research and finally found Erik Barnow's "A History of Broadcasting in the U.S." which contained a biography of Farnsworth, published in 1949. Moore says he is convinced that "Farnsworth, not Zworykin was the real inventor of television and this is verified by a decision handed down by a patent court which was never challenged by any higher court, in the patent infringement suit brought by Farnsworth against RCA".

The U. S. Postal Service announcement concerning the stamp honoring Farnsworth, states that he had more than 300 inventions in TV and related fields to his credit, and that he is "most famous for the first all-electronic television transmission. That historic event took place in San Francisco September 7, 1927".

Farnsworth, born in Beaver, Utah August 19, 1906, passed away in 1972.

### Cycles to Hertz



It was James Clerk Maxwell, a Scotchman, who in 1873, mathematically developed the nature of an electromagnetic field, but it was Heinrich Rudolf Hertz, a German, who actually demonstrated the wave character of electromagnetic transmission through space. He described his work to the Berlin Academy of Sciences on 13 December, 1888 and it created a sensation. His demonstrations were thereafter, repeated throughout the world. His work paved the way for the development of wireless telegraphy. Guglielmo Marconi, so often referred to as "the inventor of wireless" denied this, saying that he merely took the discoveries of scientists like Hertz and Branly and forged them into a practical telecommunication system. (Edouard Branly, a Frenchman, invented the coherer detector in 1844).

For many years, engineers referred to the frequency of alternating current as "cycles per second". When the term was changed to Hertz, in honor of Heinrich, there were those who felt uncomfortable in using "kiloHertz" and "megaHertz" in place of "kilo-cycle" and "megacycle". Some said the old name "cycle" was much more appropriate, because it described an electrical function. They probably forgot that many other electrical functions and terms were named in honor of a discoverer-scientist-inventor. (Voltage in honor of Volta, etc - Ampere, Ohm, Watt, Coulomb, Curie (thermo-magnetism), Galvani (galvanometer), and Gauss (magnetism). Have I forgotten anybody? Oh, yes, - "Baud" - the unit of speed in telegraphic code transmission named after the Frenchman Emile Baudot, one of the great pioneers of Telegraphy.

Donald K. deNeuf, whose articles appear on pages 28/29 has enjoyed an incredible career in our communications field ranging from Ship's Operator to President of one of our great Communication Systems. His ability to write lucidly about subjects of great interest comes through a thorough understanding and experience. We hope through the years ahead to use his talent to continue the high standard we strive to furnish in Society publications.

## Telephil Collection

The TELEPHIL theme combines a history of telecommunications with philatelic items where the latter depicts inventors, systems, or equipment involved in the former. In a number of cases appropriate philatelic items have not yet been located - or may not even exist.

Telecommunications as such is usually considered to embrace the transmission and/or reception of information, ideas, instructions or inquiries from one person or point to another person, persons, or points. The majority of conventional telecommunication is carried out through the human sense of sight and/or sound involving signals of various types. There are, or have been occasions where the sense of touch, smell, or taste is utilized. The "reading" of Braille symbols through the sense of touch by a blind person is an example. The injection of oil of peppermint into compressed air lines in mining operations quickly reaches the noses of drill operators despite high noise levels and restricted visibility being common. It is an emergency signal for the miners to immediately evacuate the mine. On the unique side, telecommunications have been conducted by Morse telegraph operators not having the customary instruments at hand, to place one "line" conductor and one "ground" connection in the mouth on the tongue. The flow of current, keyed in Morse code produced sharp acid-like tastes in step with the telegraphic keying of the distant station which could easily be read by an operator.

Generally speaking, Telecommunications can be of an alphanumeric type enjoying complete flexibility in the composition of information, or it can be of the simple fixed "prearranged" type, whether by means of sound or sight. An example of the former, is one of the various alphanumeric codes such as Morse telegraphy. An example of the later is a railroad or vehicular traffic signal - it's ability is limited to simple instruction - "stop", "caution", or "proceed". Some systems merely are an "identification" or warning signal - such as that provided by a lighthouse or air-raid signal.

Most forms of telecommunications involve the use of a "code" - an established signal system - if you will - whether it be in some form of telegraphy, the human spoken word, or textual information in visual form. You are reading (and understanding, I hope) what I have been writing here because you are skilled in the "code" of the written English language. If this had been written in Chinese probably only a few readers would understand the thoughts I'm attempting to convey. Many of us would be at a loss trying to understand someone speaking in Arabic because we are not skilled in understanding the "code". Some simple "codes" are however, almost universally recognized - the color red, or the symbol of a skull and cross-bones usually signifying "danger", or "beware", or "stop" - as does a raised human hand or arm. In vehicle operation, the sound of a police siren conveys a message quite different from that of a conventional automobile horn.

TELEPHIL makes no attempt at delving into the psychological aspects of telecommunications or into any discussion concerning extra-sensory perception, mental telepathy or similar fields. These we leave to those qualified to do so.

## East Coast Marine Stations

You will recall that as soon as ITT shutdown WSL, the WLO group acquired WSL's frequencies and have been very active in grabbing WSL's former customers.

Then out of blue somebody recently reactivated the WSC station - same location and frequencies as formerly used by WSC when operated by RCA.

Now, all of a sudden appears a brand new station WKM at nearby West Haven (Conn) announcing itself to ships as "We are a new station. Our rates are cheaper than RCA and ITT. We operate from 1000 to 0200 GMT with a Traffic List at 35 minutes past the hour. We operate on 500, 442, 8534, 12978 and 16998 kHz". And, sure enough I next heard him running a traffic list of six ship calls. Maybe they figure that RCA is going to close down WCC.

Rumors from a reliable source, say that the WLO group has approached ITT on the matter of acquiring KFS at San Francisco (Half Moon Bay) and that the subject is "under serious discussion".

Could MARISAT (COMSAT) have reached a sort of dead center - what with having acquired the tankers and other vessels needing highgrade voice channels (for data, etc.) - while there are still, globally, thousands of rust buckets needing only to send and receive a few ten word messages? You'll remember Per's letter from the Royal Viking cruise liner, saying that altho' he has complete satellite facilities aboard, he uses HF(ARQ) radio for telex and HF(SSB) for public telephone service "because MARISAT/COMSAT rates are too high, and HF is quite satisfactory in most areas of the world".

It's interesting to speculate whether all this is indicative of genius, madness, naivete, or plain damn foolishness.



## More Wamcats Pictures

ADDITIONAL PICTURES OF WAMCATS STATIONS furnished by Bob Gleason (642-P) who installed equipment at a number of ACS stations in 1931. The equipment consisted mostly of the new de Forest 2KW MF type transmitters - beautiful three bay rigs with a three phase well filtered power supply which is shown in the bottom picture at far right with operator tuning it up.

We have received several inquiries about the early name of the organization when founded by the U.S. Army Signal Corps back in 1900. The name of the system ... "WASHINGTON-ALASKA MILITARY CABLE AND TELEGRAPH SYSTEM" was euphemized by the acronym "WAM-CATS" which transitioned into "ACS" in later years. The box on bottom right of page one gave the name incorrectly.



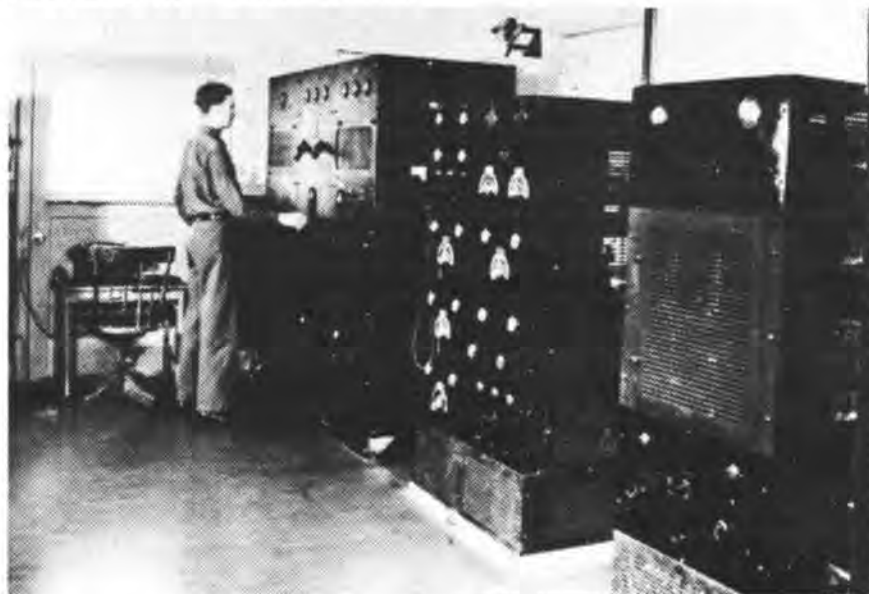
SEWARD - WXR [ 1931 ]

The "Wamcats" issue SJ 7/4 Page 22 pictured the interior of the Seward Station. Here we have Bob Gleason's picture of the exterior buildings at the site. Bob installed a deForest 2KW Xmtr. at this location.



VALDEZ - WXJ [ 1931 ]

We pictured this station on Page 23 of our last issue. However, the deep snow obscured most of the building plus the beautiful country surrounding it. Gleason photo.



FAIRBANKS - WXP [ 1939 ]

Our last issue included 2 pictures (exterior and aerial) view of the Fairbanks ACS station. This brings a picture of the interior of this important station showing the 2KW de Forest LF Transmitter at far end. Picture - courtesy of Bob Gleason.



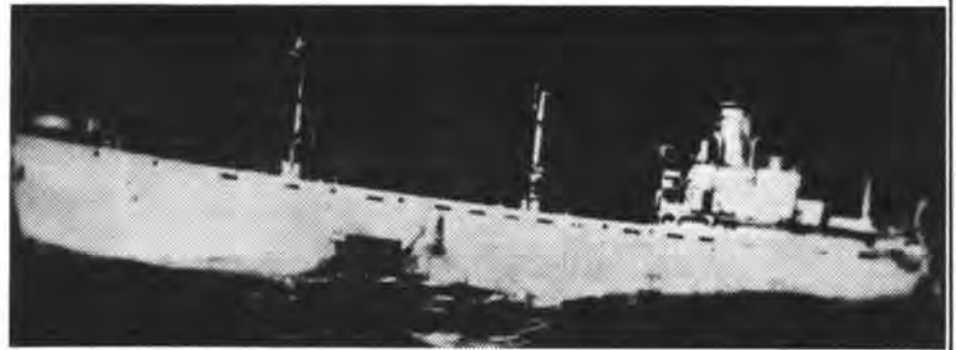
## Book Reviews

SALTWATER BOOKSHELF

### "A Careless Word . . . A Needless Sinking"

Capt. Arthur R. Moore

Published by the American Merchant Marine Museum, at the U.S. Merchant Marine Academy Kings Point, NY.



SS JAMES B. STEPHENS - Torpedoed March 8, 1943 by German U-160.

We reviewed Captain Arthur R. Moore's outstanding book ... "A CARELESS WORD - A NEEDLESS SINKING" which catalogued all of the sinkings of American Ships during WW-II, on Page 7 of Sparks Journal 6-3 in April 1984. This wonderful record - a 'labor of love' took many years of dedicated skill to complete and contains a listing of over 6000 seamen who lost their lives during the war.

Captain Moore has followed up in meticulous detail all the leads he could find to make his record accurate and complete. Since the publication of his first edition, he has published a second edition which is now sold out.

During the past year he has found the names of over 340 seamen who were not included in the first list. He plans to include these in a new edition he plans to print; Also he will furnish an appendix those those who have purchased his book with the added names.

Captain Moore has been kind enough to supply us with the name of the Radio Operators who were aboard these ships and who lost their lives during the war. We are listing them below, with thanks to Captain Moore. Listing is by name of Radio Officer, Name of Ship and the page in Captain Moore's book the ships are described and listed upon.

NAME OF OFFICER (Radio)	NAME OF SHIP	PAGE
Theodore R. Scrivener	GULFBELLE (10-21-43)	357
John F. Roche (Chf. Opr)	CHARLES HENDERSON	395
Raymond D. Wisener (2nd)	"	395
Lawrence A. Hudome ( Chf)	SAINT MIHIEL	417
William K. Berger (2nd)	"	417
Alva R. Hoskin	ARTHUR MIDDLETON	23
G.J. Kelroy (2nd)	MURFREESBORO	410
George Wiman (Chf)	"	410
Jack Gambury	SUFFOLK	419
Joseph P. Chance	GULFLAND	400
manuel Losada	JOHN MORGAN	405
Rolland Penner ( Chf)	WILLIAM H. WELCH	421
Sam Spiegel (2nd)	"	421
Benjamin Kelen	DANIEL CHESTER FRENCH	

It might be noted that although the Coast Guard maintain quite an exhaustive listing of all ships sunk, they do not record the position some of the men who died filled, as the papers have long since been lost or misplaced.

The revision and appendix of his last edition which Captain Moore plans to publish himself is only a limited issue. The new edition will contain 525 picture of ships lost during the war. This is one of the largest collection of ships Ye Ed has ever observed. The pictures are all clear cut. Narration includes Name, Home Port, (also former names); Date built and builders name, Tonage, Dimensions; Where and how sunk; Details about sinking; Route and location; Name of submarine or enemy force if known, type of cargo and many other details too numerous to mention.

The price of the THIRD EDITION of Captain Moore's book will be \$55.00 plus \$2.25 for shipping. It is an invaluable reference for all WW-II buffs, especially those of the maritime world. If you can't afford to buy one yourself, I highly recommend you request your local library to do so. It is regretful that Captain Moore lacks the ability to have each member review it personally. I can truthfully recommend it as being one of those rare outstanding books that one seldom runs across. Captain Arthur R. Moore's address is: RFD #1, Box 210, Hallowell, Maine 04347.

# Jack Binns - First Wireless Hero Honored

## BINNS WRITES PREFACE FOR RADIO BOYS SERIES

The thrilling story of the collision of the S.S. Republic (White Star Liner) with the Italian immigrant ship SS Florida on Jan. 23 1909 was published in SOWP's "Ports O' Call" in 1973 also Sparks Journal 1/4 some 7 years ago.

The story will not be retold here as we think most members are quite familiar with the fact that Jack Binns was largely responsible for the saving of nearly 1500 lives and was the FIRST Wireless-man to receive so much world credit.

A very popular series of books for boys --- "The Radio Boys Series" was published from about 1915-1925 by Grosset & Dunlap. They were authored by Allen Chapman. The "Radio Boys" appealed to many young boys including 'Ye Ed'. Jack Binns was commissioned by the author to write a Preface or Forward for each book published. These carried a fine inspirational message for boys and it also recalls an era when "Wireless" was indeed a Magic Word.

The Society's Pacific N.W. Chapter bears the proud name ... "Jack Binns Chapter" so we feel honored to perpetuate his name in history. This is part of our heritage .

Will Breniman



Jack Binns won fame in sea annals for flashing first wireless call for help.

## THE RADIO BOYS WITH THE FLOOD FIGHTERS 1925

WITH FOREWORD BY JACK BINNS

In the brief span of three years radio has inundated humanity in a wave of enthusiasm which has no parallel in history. Its influence is active along the sandy edges of Sahara, under the burning sun of Asia, on the pampas of South America, and beneath the antipodean skies as well as the more highly developed communities of Europe and North America.

Who is responsible for this unequaled expansion? The American boy!

Boys instilled with the enthusiasm, vigor, cleanness of mind and straightforwardness of purpose—such as the Radio Boys, the wholesome heroes of this series—have been responsible for the gigantic grip radio has exerted upon us all.

In this series we have seen the Radio Boys apply their hobby to every phase of endeavor to aid humanity. Now we see them apply it to rescue those threatened by one of Nature's greatest terrors—flood. With most homes radio-equipped, this terror has lost much of its horror, because radio broadcasting can now send out timely warning in time of emergency.

An example of this is portrayed in the experience of the 131st Infantry Regiment in Chicago during an Armistice Day program. A mobilization call was sent out as a test without previous notice. Within two hours the officers and men of the entire regiment had reported to headquarters as a result of the radio call.

This experience conclusively proves that the residents of an entire valley could be warned of impending danger by radio much quicker than they could by telephone.

*Jack Binns*

BOOKS FOR BOYS  
BY ALLEN CHAPMAN  
12mo. Cloth. Illustrated.  
**THE RADIO BOYS SERIES**  
(Trademark Registered)  
THE RADIO BOYS' FIRST WIRELESS  
Or Winning the Ferberton Prize  
THE RADIO BOYS AT OCEAN POINT  
Or The Message that Saved the Ship  
THE RADIO BOYS AT THE SENDING STATION  
Or Making Good in the Wireless Room  
THE RADIO BOYS AT MOUNTAIN PASS  
Or The Midnight Call for Assistance  
THE RADIO BOYS TRAILING A VOICE  
Or Solving a Wireless Mystery  
GROSSET & DUNLAP, Publishers, New York.

## THE RADIO BOYS WITH THE FOREST RANGERS 1923

THERE are two aspects of radio as a vital factor in saving life and property which are very vividly brought out in this interesting volume of the Radio Boys Series—namely its use in connection with the patrol work in detecting forest fires, and the regular international ice patrol in the dangerous waters of the north Atlantic. So splendidly have these two functions of radio been developed, that they have become accepted as



THE TIME CAME FOR JOE TO GIVE HIS RECITATIONS. The Radio Boys at the Sending Station.

commonplace in our lives, and it is only by such stories as "The Radio Boys with the Forest Rangers" that we are awakened to their importance.

Another interesting account in this volume is the detailing of the experimental work recently carried out at the Schenectady broadcasting station, when the voice which was radiated through the ether was actually reproduced from an ordinary moving picture film.

Just think of the marvel of this. The words of the speaker were photographed on a film, and held in storage for several weeks, before the streaks of light were re-converted into electric impulses, and then transferred into faithful reproduction of speech in a million homes. How great are the possibilities thus unfolded to the immediate future. Here we have a record that is better than that of the phonograph, because there will be no scratchiness from a needle in its reproduction to mar the original tones.

The period over which the Radio Boys Series has been produced has seen the most remarkable all-around development of radio in history. Now upon the publication of the latest volume in the series there comes the announcement that a Hungarian scientist has been successful in transmitting an actual picture of a current event as it is occurring.

We are upon the very threshold of TELEVISION—the system which converts the etheric vibrations that correspond to vision, and translates them into impulses of electric energy which can be radiated through space, and picked up by specially designed radio receivers. The system of course can also be applied to telegraph and telephone wires.

The development of this promising invention means that in the near future we will be able to see the person to whom we are speaking, whether we use the ordinary telephone or the wireless telephone as a means of communication. This truly is an age of radio wonders!

*Jack Binns*



In 1913 a former whaler, the full-rigged ship *Scotia*, left the River Tay to patrol the waters of the North Atlantic to keep watch for ice and to report to ships and land stations when and where there was danger from icebergs. Her posting to this duty was an outcome of the *Titanic* disaster of the previous year.

The *Scotia* was fitted with a Marconi wireless installation, donated by the company, to enable the two wireless operators which the vessel carried to keep in touch with wireless stations in Labrador and Newfoundland as well as with ships passing within range.

In the wireless cabin was fitted a standard 1½kW transmitter with a disc-discharger. Emergency equipment was also installed. Although space was extremely limited, accommodation was found for a silence cabin.

The latest scientific instruments of the period were fitted in the vessel and the deck abounded with devices of every description for making various weather observations, for the *Scotia* reported the weather conditions as well as the presence of ice.

The *Scotia* although a full-rigged vessel was also fitted with engines of 80hp capable of driving her at a speed of six to seven knots, and two 5kW dynamos were added to her engine room equipment to provide power for the wireless installation and the numerous scientific instruments on board.

Thus equipped the *Scotia* sailed—to become the forerunner of the ocean weather ships of today. The present-day British ocean weather ships are operated by the Ministry of Defence (Air) and carry a number of trained meteorologists in addition to the normal Merchant Navy crew.

Following the Second World War civil aviation began its rapid development and accurate weather forecasts were required for the upper atmosphere as well as for the surface. These were not obtainable from the observations then made by merchant ships. There was a need for a system so exact and reliable that it would enable transatlantic airlines to calculate flight plans which avoided head winds and other unfavourable weather conditions and to make the best use of following winds. Such a system was agreed upon in 1946 when the International Civil Aviation Organisation, supported by the World Meteorological Organisation, decided that 13 ocean weather stations should be established in the North Atlantic.

By 1949 the 13 stations were in operation. The USA provided the ships for seven stations; the UK two; Canada and the USA jointly, one; the Netherlands and Belgium jointly, one; and Norway and Sweden, one. These 13 stations soon proved more than adequate to cover the North Atlantic and before the end of the year it had been decided to reduce their number to 11.

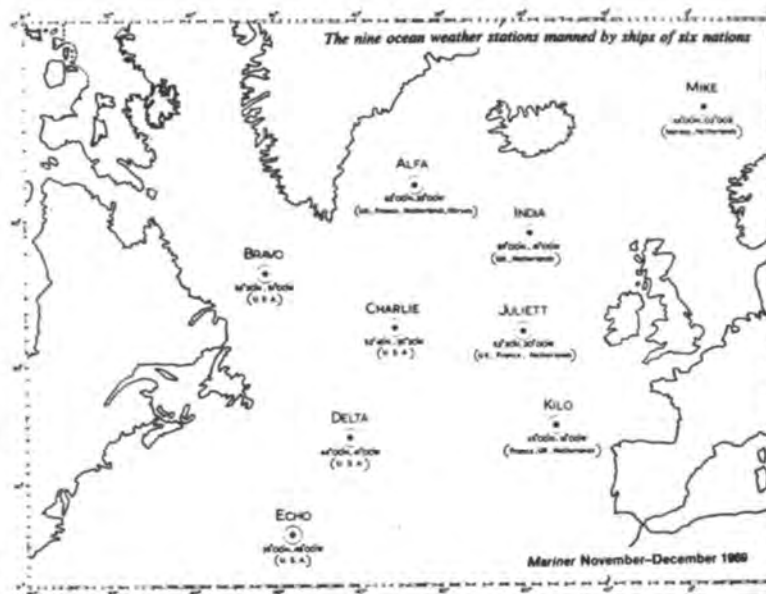
In 1954, this time for reasons of economy, the number of stations was further reduced to nine. Since then, these nine stations have been continuously in operation, the four western stations Bravo, Charlie, Delta and Echo, being manned by 11 vessels of the US Coast Guard, while the five eastern stations Alfa, India, Juliett, Kilo and Mike, are the joint responsibility of France, the Netherlands, Norway and Sweden, and the United Kingdom.

At least two ships are required to maintain continuous operation of one weather station. A ship on duty at an ocean station is in water far too deep for anchoring and therefore has to steam a certain distance each day in order to get back to the centre of her station. Statistics show that the master of a weather ship can normally be expected to know his position within a distance of about five miles.

At these stations surface meteorological observations are made every hour throughout the day and night. These observations comprise cloud amount and height, wind direction and force, visibility, present and past weather, barometric pressure and tendency, air temperature and humidity, sea temperature, and direction, height and period of waves.

In addition, an ocean weather ship makes an upper wind observation every six hours.

Observations of temperature, humidity and pressure in the upper atmosphere are made every



12 hours and for this purpose a balloon of about seven feet in diameter is used. When released this rises through the atmosphere at about 1,100ft a minute. Attached to it is a radio sonde, a miniature transmitter which, through an ingenious system of switches controlled by a tiny windmill, sends out signals of varying frequencies and these, when converted by means of an oscilloscope, indicate the temperature, humidity and pressure as the balloon rises through the air. To enable meteorologists to calculate wind speed and direction at various levels the ship's radar equipment tracks a radar target attached to the balloon. When the balloon reaches a height of about 60,000 feet it meets reduced atmospheric pressure, bursts, and the instruments it carries fall into the sea and are lost.

For direct contact with aircraft in flight the ships keep constant loudspeaker watch on radiotelephone and the captain of almost every aircraft flying over them talks to the officer on watch and receives information about the latest weather situation.

Each of the British weather ships is fitted with four Marconi NT201 long-range marine communications transmitters with hf aerial matching units and control boxes, and eight Marconi NS702 general purpose receivers. Also supplied by The Marconi Company is one AD210C vhf automatic direction-finder and one ND103 mf automatic direction-finder.

The ocean weather ships also carry out air/sea rescue operations and are in constant contact with Air Traffic Control in case they should be needed for this work.

The home base of the British weather ships is Greenock on the River Clyde, and each ship spends 24 days on station followed by a period of 12 to 23 days in harbour. The ships are rather small in size but everything possible is done to create comfortable living conditions for the 57 all-civilian crew aboard.

During fine weather at sea, boat work provides recreation as well as useful air/sea rescue practice. Aircraft of Coastal Command flying from UK bases carry out frequent air/sea rescue training exercises with the ships.

An interesting additional duty carried out by the ocean weather ships is the making of oceanographical observations for the Ministry of Agriculture, Fisheries and Food, and other interested parties. These observations include taking sea water samples and temperatures at various depths. The ships' companies are encouraged to catch fish whenever they can; one ship caught three sharks in two days, and another, on one memorable day, caught 33 unidentified fish. Ornithology is popular aboard some of the ships and a surprising number of sea birds and migrants have been sighted at these stations.

But the main business of the ships and their crews is that begun by the *Scotia* 56 years ago—the gathering and dissemination of information which will assist other vessels, and aircraft overhead, to make safe and efficient passages across the ocean. Those of us who use the sea should spare a special thought for the weather ships on station this Christmas.



The good old days? Crewmen battle tons of ice sheathing caused by freezing spray on the USCGC OWASCO during patrol on Ocean Station "Bravo" in the stormy Labrador Sea. This severe icing condition was threatening to get out of hand and endanger the ship's stability. U.S. Coast Guard Photo.





# Citations for Bravery at Sea

# THIS KEY MADE HISTORY



"GALLANT SHIP" Medal. A medal that is given to ship's officers and the crew for heroism and bravery in going to the aid of a stricken vessel - Marine Digest.



International Newsreel Photo

## THE PRESIDENTIAL TICKER

Pictured above is the Solid Gold Telegraph Key - most famous instrument of its kind in the world. At least it was back in 1926 when the picture was taken. It was made of the FIRST GOLD ever taken from the Klondike Valley.

It has been used by every President since 1909 whenever there has been a "Button Pressing" ceremony at the White House in Washington D. C.

## Lloyd's War Medal for Bravery at Sea



Reproduction by courtesy of 'Lloyd's List'

'Lloyd's War Medal for Bravery at Sea' was bestowed upon officers and men of the Merchant Navy and Fishing Fleets in cases of exceptional gallantry at sea in time of war. The medal, the two sides of which are illustrated on this page, was designed by Mr. Allan G. Wyon, F.R.B.S. The heroic figure symbolises courage and endurance and the trident sea power. The oak leaves and acorns fittingly suggest those qualities of sturdiness and endurance which are as present in our seamen who serve in ships of steel as ever they were in their predecessors who manned the 'Wooden Walls of Old England'. The ribbon of the medal is in blue and silver.

TWENTY-THREE OF THESE MEDALS  
WERE AWARDED TO MARCONI RADIO OFFICERS  
DURING THE WAR OF 1939-45

# SOWP Medal and Certificates

## PLANS FOR NEW SOWP BRAVERY MEDAL

The Society of Wireless Pioneers plans to strike a Medal for Bravery in addition to a Certificate for those we feel should be honored. The Certificates used in the past will be replaced with a more artistic honorarium and should be available by Thanksgiving. We invite members to send in any suggestion they may wish on both Medals and Certificates. The subject of retro-qualification will also be considered by our Board of Governors

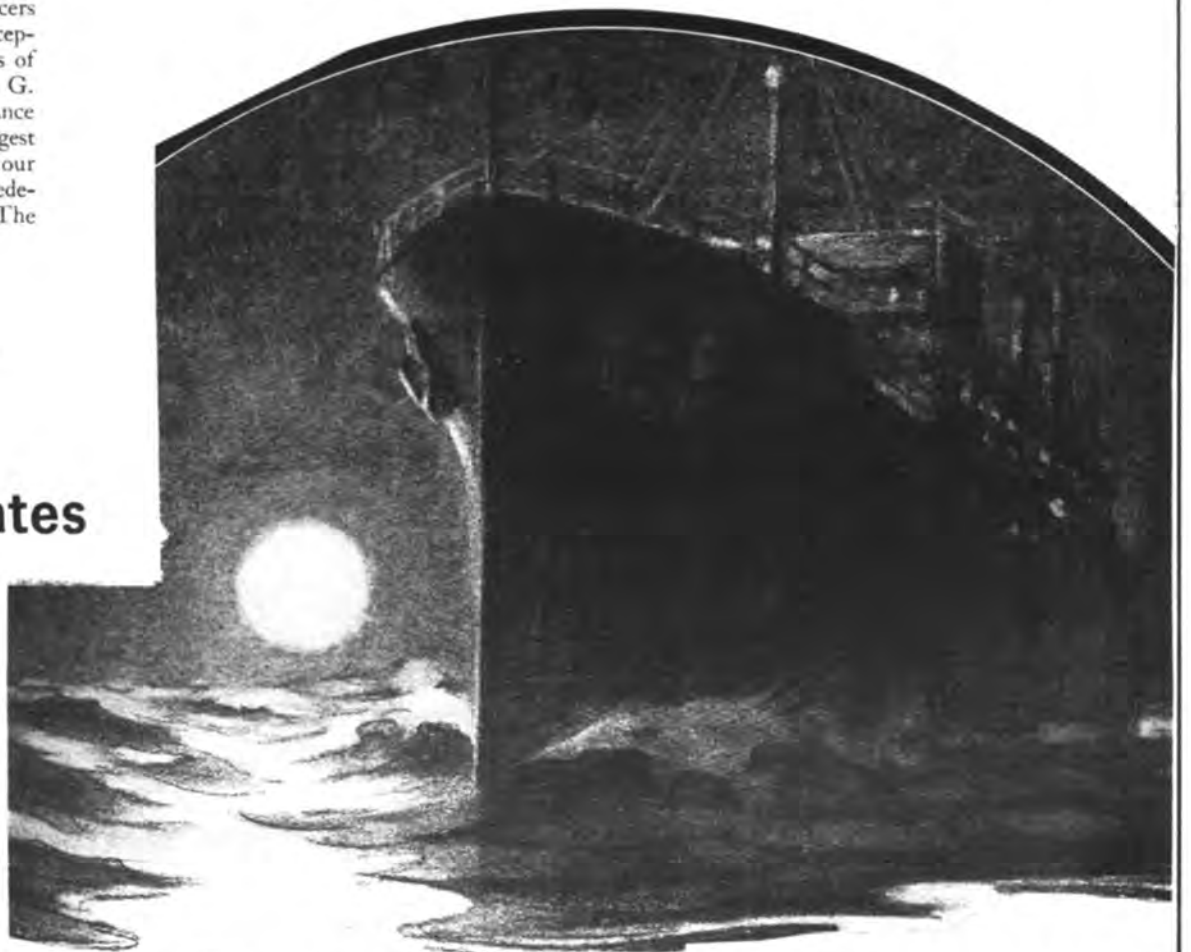
### REFUGE

When I escape highways and towns,  
I roam the golden shore  
Beside the glory of the sea  
Where winds of freedom soar.

Harassed and harried from the streets,  
In spindrift cool and dim,  
With longing eyes I watch ships sail  
Over the sea's blue rim.

My hopes wing with the silver gulls  
In misty solitude,  
My heart becomes one with the deep  
In rhythm and in mood.

-Walden Garratt





# Old Marconiville Still Lives

## HISTORICAL PAPER

By T. J. Collins

"... Massapequa, Massapequa Park, Amityville, Marconiville, Lindenhurst and Babylon."

Though forgotten by most Long Islanders, Marconiville lives on, not on the maps or in the timetables, but in its street names, its sturdy old houses and in the sometimes dimmed memories of its older residents. The 1-mile-square area of Copiague was named in honor of the famous Italian inventor Guglielmo Marconi, who visited it many times.

Walk its streets: Marconi Boulevard, Campagnoli Avenue, Dante Avenue, Amerigo Vespucci Avenue. The homes are modest, middle-class, most built after World War II, except for a relative few. Scattered among the ranches and the split-levels and the bungalows are massive two-story red brick homes and solid, clapboard houses, many built by the founder of Marconiville, John Campagnoli.

It was 1906-1907 when Campagnoli, a rich, young Italian engineer who had served as an ambassador to the United States, bought the scrub oak land abutting the Copiague railroad station on the north. He purchased it from a developer who anticipated Levittown by more than 45 years and had called his development Beautiful Brinckerhoff Manor. Brinckerhoff Manor offered lots for \$75 and up, with \$10 down and \$5 month and boasted that there were no taxes or assessments to be paid.

Campagnoli renamed it Marconiville, in honor of his friend and school chum, and changed most of the street names.

"They were classmates at the University of Bologna," Campagnoli's grandson John recently recalled as he sat in the living room of his home in Babylon Village sorting through old photos and yellowed newspaper clippings about Marconiville and his grandfather.

"Grandfather had been in the bicycle business in Italy. The bike factory still retains the Campagnoli name. He was a very wealthy man. He invested in Copiague in the early 1900s, bought about 5 square miles."

Campagnoli vaguely recalls Marconi's last visit with his grandfather. "It was 1928 or 1929, or it may have been earlier. I was about 8 or 9 at the time. It was quite an occasion. My grandfather was very honored by the fact he was remembered by his classmate. I used to have a picture of me sitting on Marconi's knee, I just can't seem to find it."

How many times Marconi visited Campagnoli is uncertain. But Marconi was no stranger to the Island.

In 1901, in a small wooden shack on Fire Island Avenue and Virginia Road in Babylon Village, he began experimenting with the possibility of sending wireless or radio messages to ships at sea. That shack still exists, though the plaque which once marked the spot on which it stood was stolen years ago.

It was about 1920 when the RCA Corp. moved the shack to the company's property in Rocky Point, where it remained in a shed for many years until it was acquired by the Rocky Point Sons of Italy.

At present, the shack stands in the schoolyard of the Joseph Edgar Elementary School on Route 25A in Rocky Point.

Campagnoli strove to make Marconiville's future a glorious one. Opposite the railroad station he built a hotel and called it, of course, the Marconiville Hotel.

In front of the hotel, in a grassy area facing the railroad station, he emblazoned the name "Marconiville" in huge letters made of cement and painted white.

"The kids would cut the lawn and keep the letters white," recalled Renato Giorgini, who was one of a group of villagers who had their picture taken with Marconi in front of the hotel in about 1912. "We used to sit on the cement and watch the steam trains go by at night and see the flames coming out of the engines," Giorgini, who is now 74, recalled. The area where the name stood is now a station parking lot.

Giorgini, who still lives in Marconiville, also helped build the Marconi Community League building, which still stands on Marconi Boulevard just east of Verrazano Avenue. "The members started building it about 1920 or '21. After the club went bad, we lost it for taxes—that was about 1927."

Giorgini also recalls the beginnings of Marconiville's church, Our Lady of the Assumption

Below left, John Campagnoli's home on Great Neck Road in Marconiville. Below right, Campagnoli, left, and an unidentified friend flank Guglielmo Marconi, for whom the area was named.



"The basement was the original church," Giorgini said. "There was no heat. Nothing. The foundation was covered with 2-by-10s and tar paper." It was 1941 before the main body of the church was built.

Giorgini estimates Campagnoli may have built 30 to 40 homes in the community in addition to the lots that he sold. "Marconiville started to fade when he went to Italy. Then he sold the real estate office and the property at the railroad station. Now it's a parking lot." Marconiville was always legally part of the village of Copiague, not an official community of its own.

Campagnoli died in Italy in 1950 at the age of 80, 13 years after Marconi's death in Rome. He had returned to his native country because his wife wanted to be near their daughter.

The Copiague Post Office is now where the Marconiville Hotel once stood. "It burned down in 1925," said Max Araujo, 80, who owns the post office building as well as the adjacent two-story brick building on the northeast corner of Great Neck Road and Marconi Boulevard. "I came here in 1926. In 1927 he [Marconi] was here. He had two Fiat cars. One a touring car, the top used to go down. It was nicer here then."



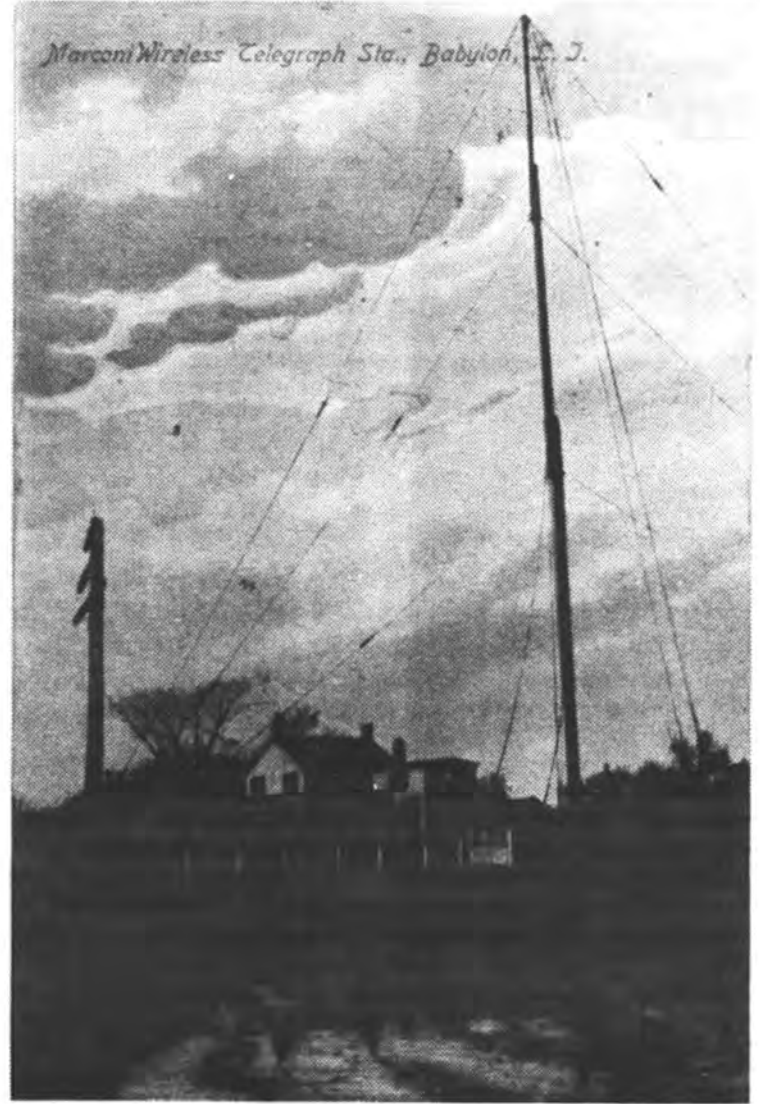
A Square Mile Of History Pages 4-5

Street Map of Marconiville, area's namesake for Guglielmo Marconi; Lower insert - "MARIVILLE" which identifies location of station.

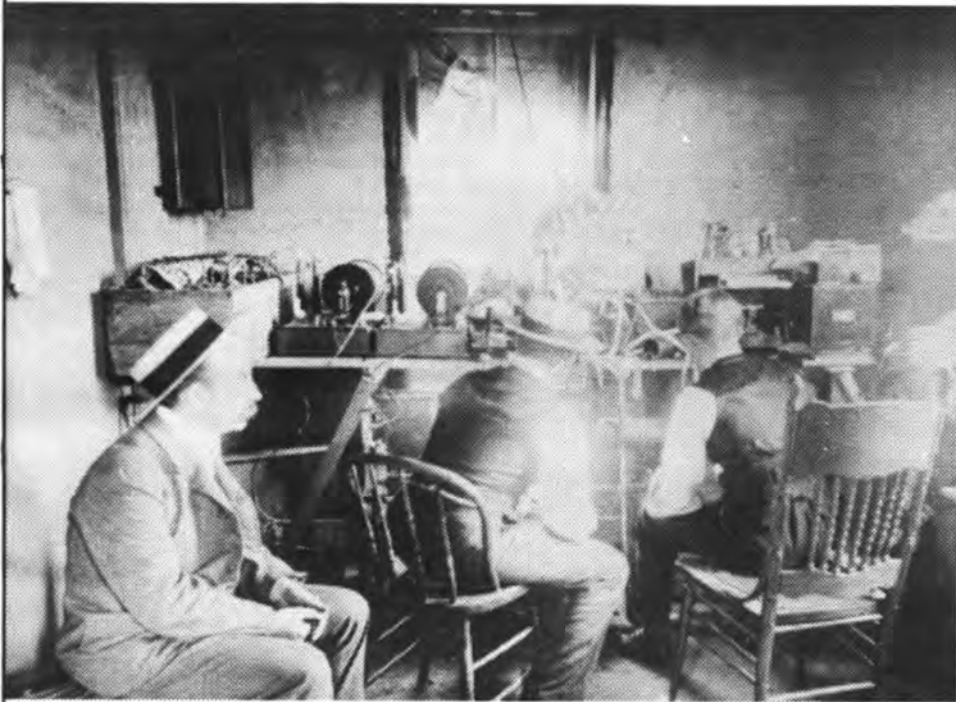
Reprint from "NEWSDAY" May 13 1980 by T.J. Collins; Graphics by Gary Rogers. Thanks to SOWP Member Robert V. McGraw who furnished clip and initial material.



"MARCONI'S BABYLON SHACK"  
Now preserved on grounds of Rocky Point, Long Island School.  
Photo taken July 1984 by Robert V. McGraw. SOWP 2356-V



"The Babylon Shack"  
The original Marconi station at Babylon, Long Island, NY.  
1902. Picture from collection of SOWP Member R. V. McGraw  
W2LYH [ 2356-V]



Operators working the early radio equipment of the Marconi Station at Babylon". Exact date unknown but believed to be in 1902. Photo from old lantern slide, preserved by SOWP Member R.V. McGraw.

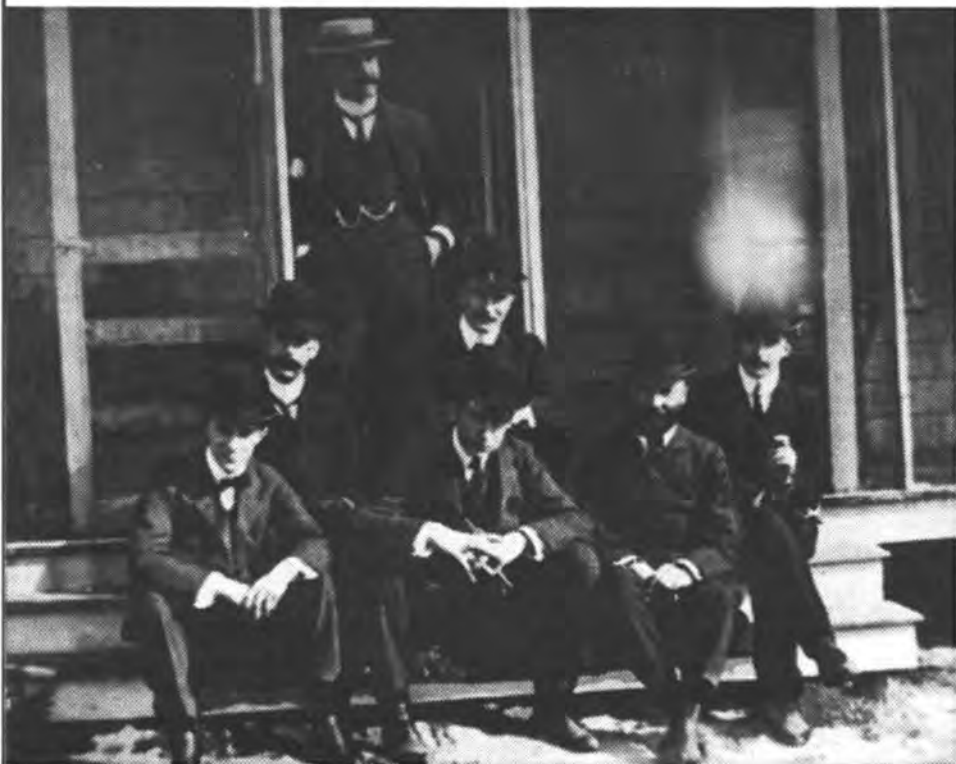


Before

A 'then and now' look at the same stretch of Great Neck Road in the Marconiville section of Copiague, above.  
Below is the shack, originally located in Babylon Village, where Marconi performed early radio experiments.



After



Marconi and others, date unknown (Reprinted from old lantern slide by R.V. McGraw.



GUGLIELMO MARCONI  
Picture taken in his WW-II uniform of the Italian Navy which he had inscribed and given to his friend Campagnoli.

S. O. W. P.

## Ed Raser - Pioneer



## A lifetime of wireless dedication

Ed Raser Helped Start Trenton's First Radio Station

By RUTH WOODWARD

"Morse telegraphy built America," is the emphatic statement of Ed Raser of the W2ZI Historical Wireless Museum. "It's the number two means of communication, with the pony express number one." Anyone talking to him soon senses that as far as he is concerned wireless telegraphy is really number one.

It takes only a few minutes to recognize his enthusiasm for wireless. "When I heard my first wireless signal I said to myself, 'I'll just have to be a wireless operator.'" He not only became an operator, he has continued to be active in wireless and radio for well over 60 years, and he's still excited about it.

Mr. Raser's wireless museum is housed in only two rooms in the back of his home at 19 Blackwood Drive in Ewing Township. But the shelves are crammed with wireless equipment, vacuum tubes and radio memorabilia, all neatly arranged. "I have no junk," he says as he looks at the crowded shelves. "All my equipment is historical, it goes back to the turn of the century, back to 1899 Marconi equipment."

MR. RASER STARTED his collection in 1926 and later opened the museum in the basement of his home on Beechwood Avenue. When he moved to the Blackwood Drive address he set aside two rooms for his collections. "But," he says ruefully, "it's a little crowded. I should have built it twice as big." The formal name for the memorabilia he has gathered together is the Edward G. Raser (W2ZI) Historical Collections on the Art of Wireless or Radio Telegraphy, Radio Telephony, and the Wire (Morse) Telegraph System.

W2ZI are his call letters as a wireless operator. He started sending out calls on an old Marconi wireless set before licenses were required, but in 1923 he was licensed with those letters. He's still on the air every day, communicating with other operators all over the country, many of whom head for his museum whenever they're in this area.

Ed Raser joined the Navy as a wireless operator in 1917, and was assigned to special service at Cape May Naval Air Station. There he installed the first spark radio equipment aboard some of the old Jenny airplanes. He went along on submarine detection duty each morning to test the equipment, and credits it with saving his life. "Our motor konked out

one day and we were down at sea. We had pontoons and so we made a good landing even with a choppy sea. But we started drifting." That's when Mr. Raser unrolled his antenna and sent out a distress signal that was heard by the Navy cutter Itaska which came to their rescue.

Mr. Raser helped to design Trenton's first radio station, WMAL, and put it on the air in 1922. Later he designed and built WOAX, now WTNJ, building a 500-watt transmitter and amplifiers that carried the sounds of Trenton as far as California.

A GOOD MUSEUM should not only have exhibits for casual visitors, it should also be a place for serious research. Mr. Raser's library in the

museum attracts visitors from all over the country who are interested in the history of wireless. None of his books can be taken from the library, but he welcomes those who want to use them at the museum. There are biographies of all of the early pioneers in wireless and radio. He speaks with special affection of Lee deForest, inventor of the vacuum tube and the man who first broadcast election returns in 1916. "Without the vacuum tube we'd have nothing. The vacuum tube was the start of radio, television and the computer." Ed Raser is a charter member and director of the deForest Pioneers, Inc. who meet each year at Fraunces Tavern in New York City.

The library has complete bound collections of all the wireless magazines published in the United States. "Here's Volume, Number 1, 1913 of QST." The magazine takes its name from the amateur call signal and contains a history of the communications business over the years. Ed Raser has been a long-time active member of all of the wireless organizations.

A plaque says that he is one of the oldest members of the American Radio Relay League. He's a charter member of the Atlantic Wireless Association, which is affiliated with the Smithsonian. He's Charter Member No. 35 of the Society of Wireless Pioneers, which now has over 3,000 members. He's a member of the Titanic Historic Society and of the Veteran Wireless Operators Association, as well as a fellow of the Radio Club of America.

Moving into the second room of the museum, you realize why he could use twice as much space. There's a collection of over 300 different tubes, with the early ones largely deForest tubes. There's a tube that was used at the Lawrenceville overseas station and a tube that was used for the first TV station in New York on the Empire State Building tower.

HIS COLLECTION includes the telegraph key which sent the SOS from the Morro Castle as it was burning off the coast of Asbury Park in September, 1934. There's a replica of the battery-operated auxiliary transmitter that was used by the Titanic after its power was lost, to communicate with the Carpathia. There is an original Marconi vacuum-type coherer that was built in the Chumford Shops of the British Marconi Company in London, as well as a Marconi tuner from the Marconi Wireless Telegraph Company of America.

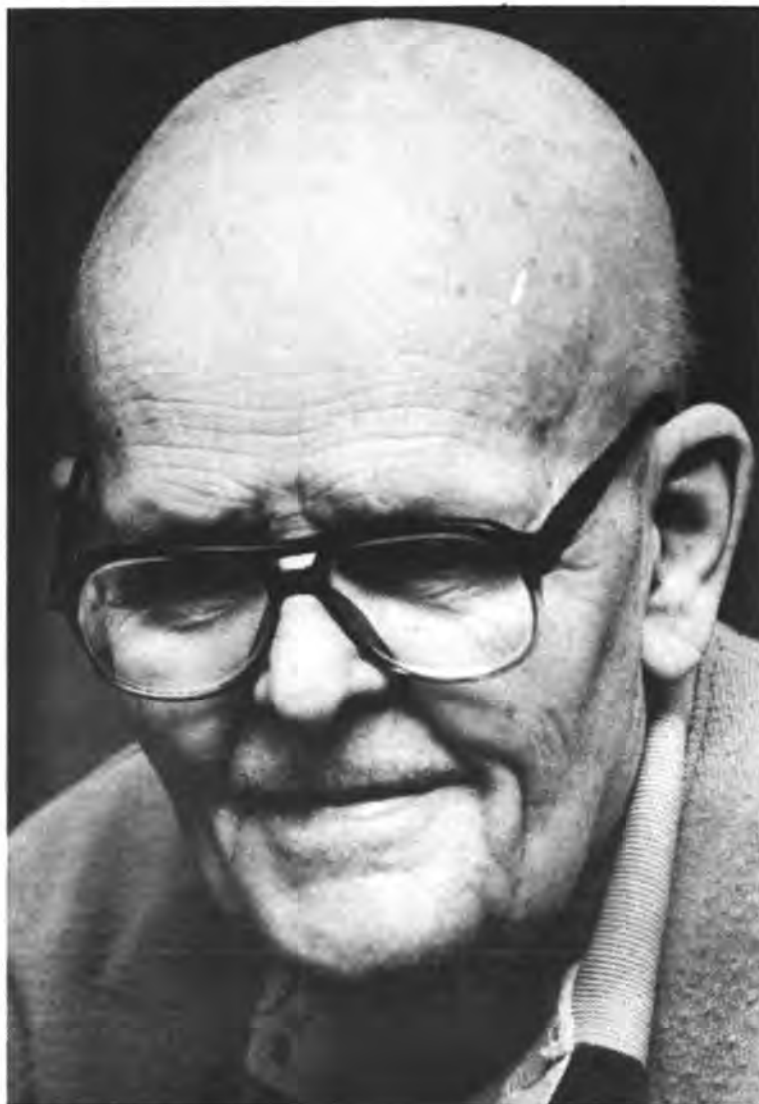
Mr. Raser attended the dedication of the 80th year of America's first wireless station at Twin Lights, Highlands, N.J., which was established by Marconi in 1899. He explains that Marconi was brought to this country by the New York Herald to broadcast the international yacht races from Atlantic Highlands. He established the station at Twin Lights, had another station located on a tug boat, and transmitted the results of the race in the first broadcast in this country.

There's a 1910 crystal set, a World War I trench receiving set and a German loop antenna of World War I. The collection of Morse keys dates back to 1850, the smallest nestled in a match box. The largest, weighing 10 pounds, was once used at Rhode Island's Point Judith station. And there's Mr. Raser's own equipment which he used aboard ship during World War I.

When he demonstrates his spark system you realize why wireless operators were always nicknamed "Sparks." When the switch is thrown and Mr. Raser starts tapping the telegraph key, sparks flash through the air and the room is filled with the smell of ozone.

Mr. Raser is quick to give credit to the many amateur radio operators and commercial wireless men who have contributed to his collection. But it's still really a one-man operation. He has spent years collecting, cataloging and arranging his material.

Many wireless buffs acquire the nickname "Sparky," a throwback to the early rotary spark gap transmitters which emitted sparks in the course of their functions. This one is an early 1920's model.





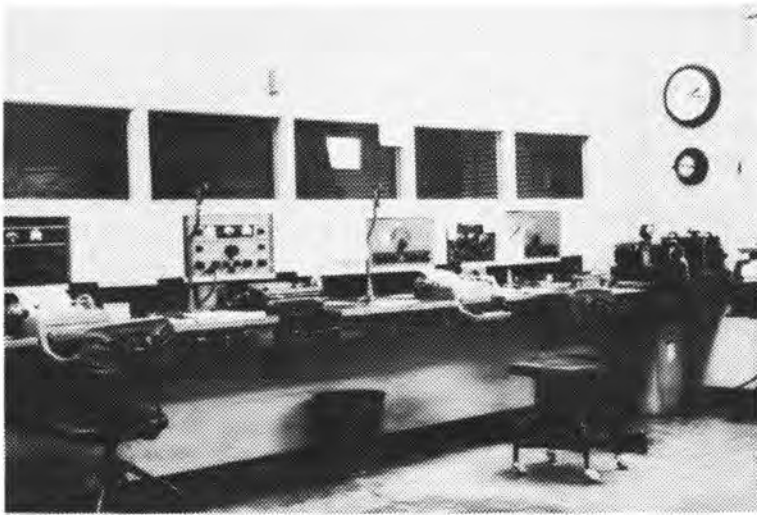
Ed G. Raser, W2ZI, Wireless Historian at the old Saville, (Long Island NY) Station site. Call: SLI/WSL.(1956)



Looking up at the giant wireless tower and umbrella antenna on the marshes at Tuckerton NJ HO. Station ( Photo by Ed Raser, 35-SGP.



Picture of Ed Raser's " W2ZI" Historical Wireless Museum showing collection of commercial and amateur early day wireless equipment. Most of this now in the AWA Museum ( Ed Raser Room) Holcomb, N.Y.



The 500-kilocycle and H-F operating positions at WSC Tuckerton, NJ. It is now located at West Creek, NJ. ( Photo by Ed Raser W2ZI (35-SGP)



Original Building German's built for Trans-Atlantic Service at Sayville Long Island circa 1956. Picture taken by Ed Raser



Member Ed Raser [SGP-35] displaying base of the original Tuckerton 865-foot Wireless Tower used in original installation. Located on the marshes at Tuckerton NJ. Picture from Raser's collection.

### The W2ZI Historical Wireless Museum

*Registered with American Association of Museums and The Library of Congress*

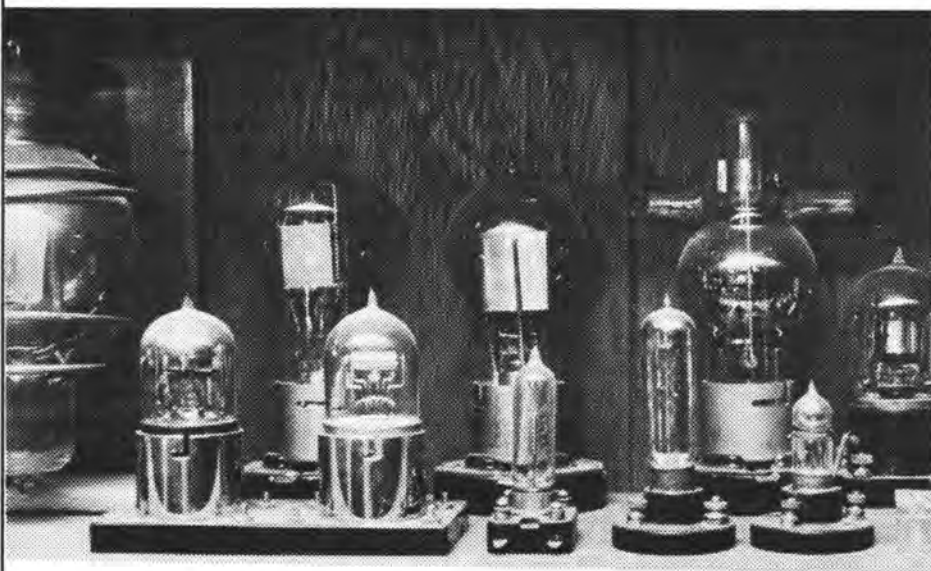
The name of Ed Raser has been identified with the radio nee Wireless profession for three quarters of a century. He was among the avant-garde of operators who worked early commercial and naval ships and stations. Later as technician and engineer he built on of the East Coasts early broadcast stations and later was identified with early Signal Corps work in the Communications field which reached into the White House.

His name and stations in the Amateur Field date back to 1910 when he first went on the air with Call "RE" (Reverse name initials). First licensed station was "3NG" in 1915. He was member No. 381 with the newly organized ARRL and very active in DX and traffic handling and one of first appointed "ORS" (Official Relay Stations of ARRL.

Ed Raser is perhaps best known for his now famous collection of early day wireless memorabilia and artifacts which he organized into one of the largest private collections to be found in the U.S. or Canada. These he displayed for many years at his very famous "W2ZI HISTORICAL WIRELESS MUSEUM" in Trenton N.J.

Ed has been a member of many of our leading fraternal organizations including VWOA, OOTC, QCWA, MTC, RCoFA and of course SOWP. He is a Charter Member of the Society [35-SGP] and presented the Society's "Wireless Achievement Award" in 1976 He is a Fellow member of the Radio Club of America and presented the Ralph Batchelor Memorial Award in 1980 (Preserving history of radio and Communications.

The "W2ZI" collection has been relocated to East Bloomfield, N.Y. where it can now be seen at the "AWA" HISTORICAL MUSEUM. Bruce L. Kelley is Curator and we suggest contacting him to be sure it will be open when you wish to visit. His QTH: Main St., Holcomb, NY 14469 (Phone 716/657-7489) Be sure include SASE if you write. Be sure to see the "W2ZI" collection in the Ed Raser Room, set aside to display his collection and library.



An array of early Audion tubes, used to amplify and detect signals.

## Judge Murphy Rules

### It's the Law!



1. **MURPHY'S LAW:**  
If anything can go wrong, it will.
2. **BRENNAN'S COMMENTARY ON MURPHY'S LAW:**  
Murphy was an optimist.
3. **THE UNSPEAKABLE LAW:**  
As soon as you mention something, if it's good, it goes away; if it's bad, it happens.
4. **NONRECIPROCAL LAWS OF EXPECTATIONS:**  
Negative expectations yield negative results. Positive expectations yield negative results.
5. **TED PHELP'S LAW:**  
Every man has a scheme that will not work.
6. **SHELLENBARGER'S LAW:**  
Once you open a can of worms, the only way to recan them is to use a larger can.
7. **MEHRLING'S LAW:**  
The other line moves faster.
8. **BURGMAN'S LAW:**  
That quantity which, when multiplied by, divided by, added to or subtracted from the answer you get, gives you the answer you should have gotten.
9. **LAW OF SELECTIVE GRAVITY:**  
An object will fall so as to do the most damage.
10. **DANE'S LAW:**  
The chance of the bread falling with the buttered side down is directly proportional to the cost of the carpet.
11. **CADY'S LAW:**  
If a research project is not worth doing, it is not worth doing well.
12. **HERB. SCOTT'S LAW:**  
If the facts do not conform to the theory, they must be disposed of.
13. **PETE PETER'S LAW:**  
Inside every large problem is a small problem struggling to get out.
14. **KORF'S LAW:**  
When in doubt, mumble.
15. **THE GOLDEN RULE OF ARTS AND SCIENCES:**  
Whoever has the gold makes the rule.
16. **de NEUF'S LAW:**  
A man with one watch knows what time it is. A man with two watches is never sure.
17. **90-90 RULE OF PROJECT SCHEDULES:**  
The first 90% of the project takes 90% of the time, and the last 10% takes the other 90%.

Thanks to "TCA" the Canadian Radio Amateur Magazine for the idea. A few names have been changed to protect the guilty.

#### DID YOU ATTEND GALLUPS ISLAND RADIO SCHOOL ?

Member, Arthur D. Bradford RI6, 214 Chestnut Street, Duxbury, MA 02332 [Phone - 617-934-2756] would like to contact those who attended this Radio School in Boston Harbor during WW-II whether you worked on the Island, graduated or flunked out..

#### 'MORSUM MAGNIFICANT'

This is a quarterly devoted to Morse telegraphy and published in the Netherlands. Its publishers, Member Dick B. Kraayveld, PA-3ALM QTH: Merellaan 8, 3145XE, Maassluis, The Netherlands will send you a copy for \$2 US. Quite interesting about keys and telegraphic gear written by professionals.

## The Secret Weapon of 1862

By John H. Melville

Forlorn and slowly crumbling on its chocks in Jackson Square, New Orleans, stands the shell of the Confederate submarine, Pioneer: the first iron-clad underwater war vessel ever constructed.

Under cover of great secrecy the Pioneer was planned and built at the Government Naval Yard in the New Basin in 1861. Her designers were three stout hearted patriots of the Southern Cause, Messrs. Baxter Watson, James R. McClintock and Horace Lawson Hunley.

It was the earnest hope of the builders that, with this weapon, they would have the Union fleet at their mercy and be in a position to destroy any ship that came within range.

The Pioneer was an ingenious contraption; an adventure into the realm of fantasy for those days long ago. She was sired by desperation out of hope.

Built of sheet iron  $\frac{1}{2}$ " thick, the craft was 19' 6" long, 4' beam, and 6' from keel to top of access manhole. Motive power was provided by a hand-driven shaft to which, at one end, was attached a four bladed propeller. This drive shaft was bent to form two cranks at which a like number of strong men, doing their utmost, could muster a maximum headway of some 4 miles per hour. No fuel was required to operate the Pioneer.

To enable her to submerge, a water-tight deck was laid across the interior, about 2 feet above the bottom. The space beneath this deck formed a water tank which, when filled, would reduce the buoyancy sufficiently to permit the vessel to submerge. The water compartment was connected to a handpump so that the sub could be brought to the surface by ejecting the water therefrom. Ventilation during submersion was provided by a length of rubber hose leading from an opening in the upper part of the shell to a float which was towed along as the sub moved. This was an early type of "snorkel".

The lethal armament of the Pioneer was perhaps the crudest part of the whole plan. Out of the stem, projected a wooden pole, about 20 feet long. The business end of the pole was fitted with a detachable iron lance head, barbed like a whaler's harpoon. Attached to the lance head was a waterproof bag containing about 50 lbs of gun powder. According to theory, the sub would approach an enemy ship and, while underwater, drive the lance into its victims wooden hull--then back off. Detonation would be accomplished by means of a long line attached to a bottle of acid in the powder bag and the other end to the sub. When the sub went into reverse, the line became taut, broke the acid bottle, thus igniting the explosive.

The Pioneer was laid down during the latter part of 1861 and launched in February, 1862. To the amazement of everyone, except possibly her designers, the "seegar-boat" floated.

Tests and trials were still under way when, during April of 1862, the Union fleet, under Admiral Farragut, blasted its way up the Mississippi and captured New Orleans. To avoid having the secret weapon fall into the hands of the enemy, the sponsors of the Pioneer hurriedly towed their brain child out into Lake Pontchartrain during the dark of April 27, and scuttling the infant, sent it to what they thought would be final oblivion.

However, the luckless Pioneer was not destined to rot unseen, in a watery grave. One day, in 1878, sixteen years after taking her final plunge, a youngster, in for a swim in the lake, discovered the strange contraption half buried in the sand beneath the surface of the water. He promptly reported his find and the Pioneer was raised and set on land at Spanish Fort. In 1907, the hulk was removed to Camp Nicholls Confederate Soldier's Home. Years later, it was moved to Jackson Square and placed on permanent exhibition there on June 14, 1942.

Although the Pioneer was fated not to see action in the war for which she was built, a later sub, constructed from the same plans, did blow up the USS Housatonic, off Charleston Harbor in 1864. In doing so, however, it blew itself up, drowning all of its crew.

Note: The facts used in this article are taken from historical data on exhibition in the Mississippi River Room of the Presbytere, the Natural History Building of the Louisiana State Museum. JHM.



CONFEDERATE SUBMARINE

"PIONEER"

BUILT IN 1862

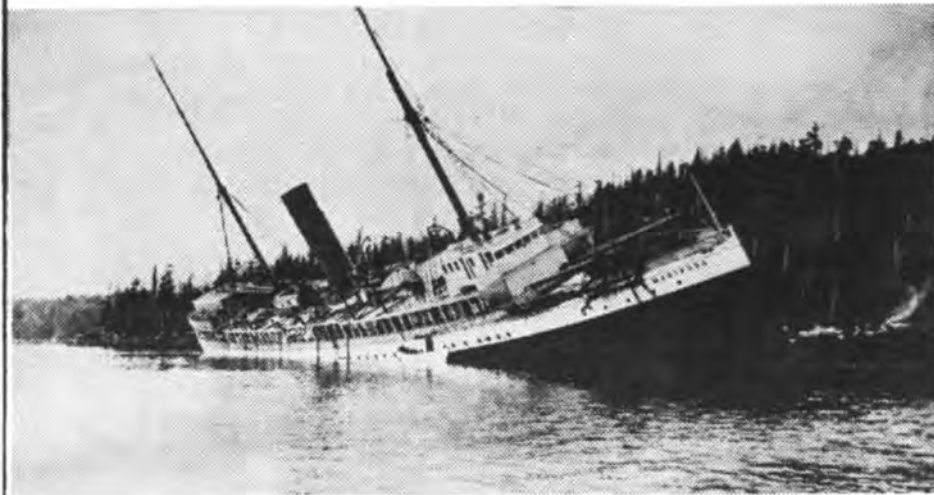
AT NEW ORLEANS

John H. Melville - PHOTO



**U.S.S. DELONG - NWB**

This 'Tin Can' or Four-Stacker of the U.S. Navy went on the beach during fog sometime in 1922. Report it made an error in copying a radio-bearing from the Farallon Island Group stations. Picture furnished by Member Clare Mulligan 1189-P who was stationed at the R/C station taking one of bearings.



**S.S. MARIPOSA - WHP**

Alaska Steamship Line passenger ship bound from Seattle to S.E. Alaska and Cook Inlet struck a rock near Point Hunter (Bella-Bella) Oct. 8 1915. SS Despatch rescued 139 passengers. Postcard picture furnished by Dexter S. Bartlett (D).

# 'High & Dry'



(Continued from Page 40)

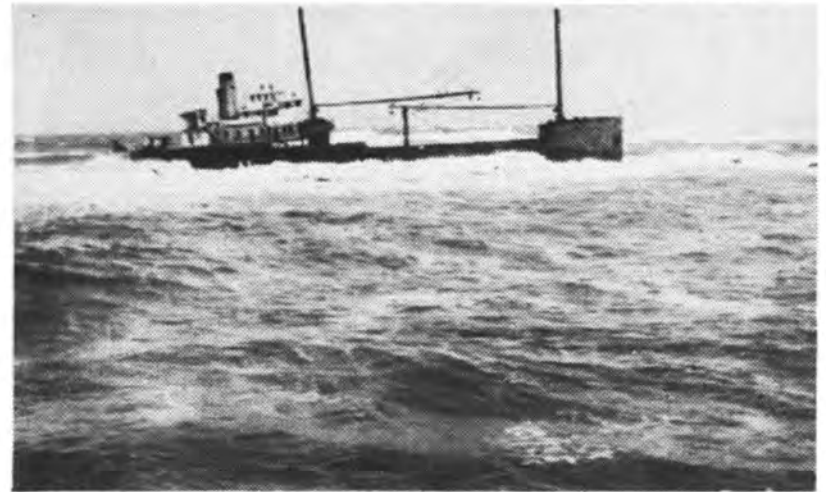
## Membership Qualifications

FELLOWSHIP in the "DRY-LANDER CLUB" is open to our "Naughtical Knights" of the Key [NKOTK] whose ship suddenly decided to take an 'overland shortcut' instead of following the usual course on the navigational charts. Going back through history, we find that from the days of the Phoenicians, sailors have tried to navigate their vessels overland and there are many documented reports of failure. Most experienced navigators have long since decided that it was too difficult for most ships to push rocks, reefs and islands out of their way to reach their destinations.

Quite a few of our members have been on ships that tried the 'short-cut' method. They have verified the report that it can't be done! The "Ship of the Desert" is the only land-craft that can navigate on terra firma with any degree of success and even they have to use the genus Camelus for locomotion.

A number of our members have been on ships that the mate has turned inland at the Cliff House or outer reaches of Market Street to reach anchorage along the Embarcadero but it didn't work. The evidence (exhibit "A" - Frank H. Buck) is proof positive that this is poor procedure..

A certificate (of sorts) will be furnished members who can document application with picture (if possible) and details as to time and place. The "M-E" Pimbsoll Mark must be at least even with the high water mark at low tide. Include a \$10 - large envelope with S.A.S.E. if you wish to apply. Jack Tar - Secretary Dry-Landers.



**STEAM SCHOONER COLUMBIA - WHC**

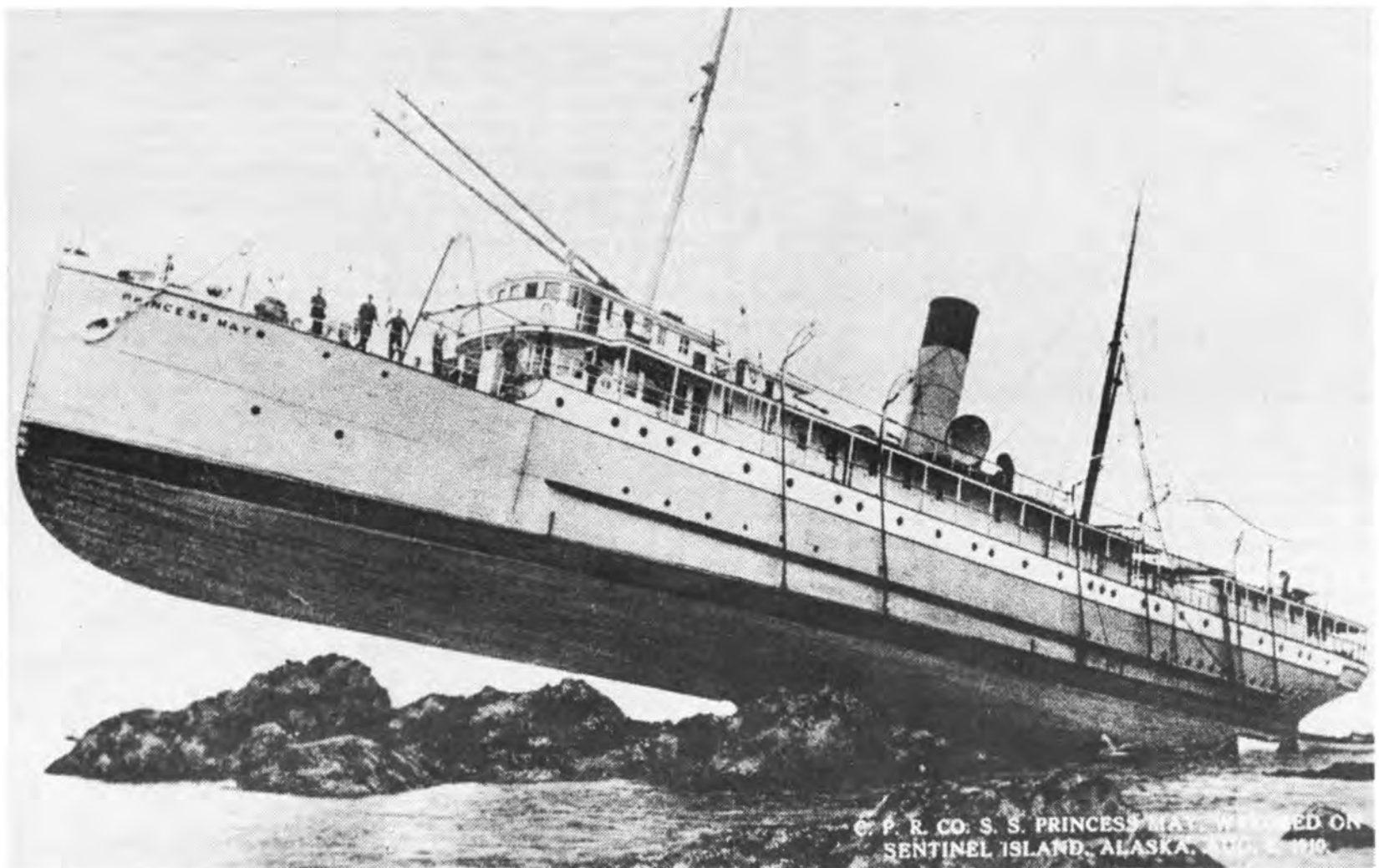
Lost Feb. 17 1924 at Coos Bay. Ship was chartered to the McCormack SS Co. All hands aboard saved but ship was lost. Geo. Meister Photograph.



**S.S. ADMIRAL BENSON - WQA**

Portland Steamship Company Passenger Ship was lost on Peacock Spit (Columbia River) Feb. 15 1930. C. C. Graham was Captain. Fred Robert was R/O. Ship carried 35 passengers and crew 65. Passengers and crew were rescued by breeches buoy and life boats. Joe D. Williamson collection

# The 'Dry-Lander' Club



C. P. R. CO. S. S. PRINCESS MAY, WRECKED ON SENTINEL ISLAND, ALASKA, AUG. 5, 1910.

S.S. PRINCESS MAY - **WVHF** *VFH*

The Canadian Pacific Railroad's Passenger ship went ashore on Sentinel Island, Alaska August 5 1910. 'It' was later refloated on a high tide. Passengers and crew evacuated without loss of life. Joe Williamson Photo.

S.S. FRANK H. BUCK - **WTO**  
Associated Oil Tanker, ashore at Point Pinos, Monterey Bay May 3 1924. Refloated and sunk 3-6-37 in collision with S.S. PRES. COLLIDGE in Golden Gate Channel. Picture from collection of Raymond Walling (D)Member.



Photo Credit - LEON GRABOW, SR.



**SS. BEAR -WVO**

Grounded at Sugar Loaf Rock near Cape Mendocino June 14 1916, SOWP Member Leon S. Grabow, Sr. [SOWP S/SGO] was operator and sent SOS for aid. 182 passengers and crew rescued by Blunts Reef Light Ship transferred to SS Grace Dollar. Five were lost and several injured in boat accidents during the rescue. Picture by Grabow.



**S.S. PECTAN - MAS**

Ran aground on San Clemente Island in Feb. 1914. Henry Dickow Operator. Ship was British Reg., Chartered to Union Oil company by Shell Oil Co. Hit reef and beached. Refloated and towed to San Francisco by Revemie Cutter McCulloch who answered SOS call. Henry Dickow Photo. (HD, Sowp # 3-SGP. SK. 4-17-71)

\*\*\*\*\* The "Wireless" - Our Proud Heritage! \*\*\*\*\*

## SPARKS JOURNAL

\*\*\*\*\* SOCIETY OF WIRELESS PIONEERS, INC. \*\*\*\*\*

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SANTA ROSA, CALIFORNIA 95402

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